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NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT NO. 13

LAND VENTILATION BUILDING
RIVER VENTILATION BUILDING
INTERIOR SPRING ST. SHAFT
INTERIOR CANAL ST. SHAFT
INTERIOR RIVER SHAFTS

NEW YORK

CONTRACT DRAWINGS 113 to 140

PART No. 3 of 3 PARTS

1925

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NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

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PART No. 3 of 3 PARTS

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NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

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Chief Engineer

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

LIST OF CONTRACT DRAWINGS

Contract No. 13

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PART No. 3 OF 3 PARTS.

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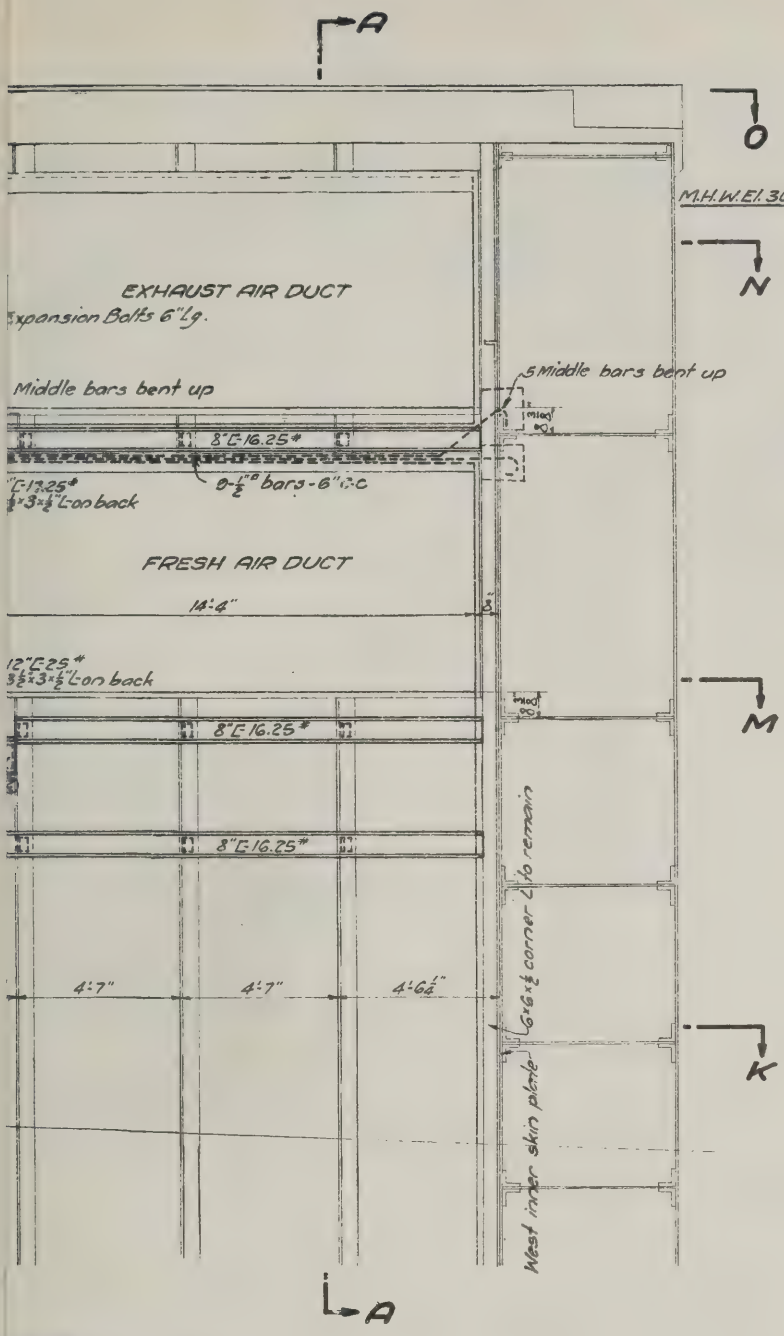
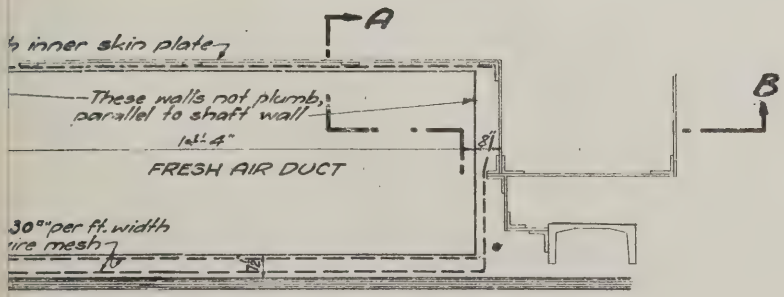
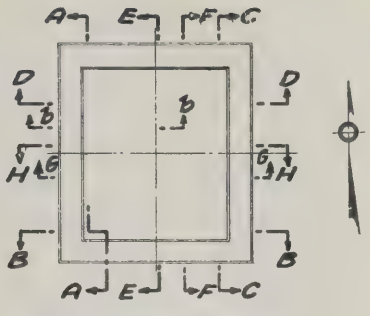


B-B



Tunnel Type of Cove at ceiling

K-K



KEY TO SECTIONS

Note:- All 7/8" Steel Hanger rods to have at each end 1-nut and 1-1/4" thick washer. Rods threaded 3". Threads to be checked to prevent nuts from turning.

All non-corrosive metal hanger rods to have at each end- 1-non-corrosive metal nut. 1-1/2" thick 3"-Dia. N.C. washer, beveled where shown. Rods threaded 3". Threads to be checked to prevent nut from turning.

All pairs of Ls & B to be separated by 3" diam. washers and stitch rivets about 3'-0" c.c. These to be staggered in pairs of B. & Ls

Hanger rods except in Ventilation Ducts to be wrapped with .075" per ft. width wire mesh and encased in concrete 3" thick.

Use 7/8" rivets unless otherwise specified.

(1) Denotes number of field rivets used (2) number of shop rivets.

(30) Denotes number of 15/16" holes to be drilled after erection. Open holes 15/16" unless otherwise specified.

2" Concrete cover on skin plates is to be reinforced with .075" per ft. width wire mesh welded to skin plate or rivet heads unless otherwise noted.

Concrete cover on steel beams and angles is to be 2" thick and reinforced by wrapping the member with .075" per ft. width wire mesh.

Minimum distance between high tension conduits and reinforcing steel 6"

Interior surface of Air ducts to be finished concrete.

Rgh" Denotes surface of concrete to be roughened for securing tile.

On North and South Inner Skin Plates, where 2" Concrete Cover is shown, O.S. leg of existing 6"x6"x 5/8" vertical Ls to be burned off.

Beam Wrappers under all Floor Beams

NEW YORK STATE
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THE HOLLAND TUNNEL

CONTRACT No. 13

CONTRACT DRAWING No. 113

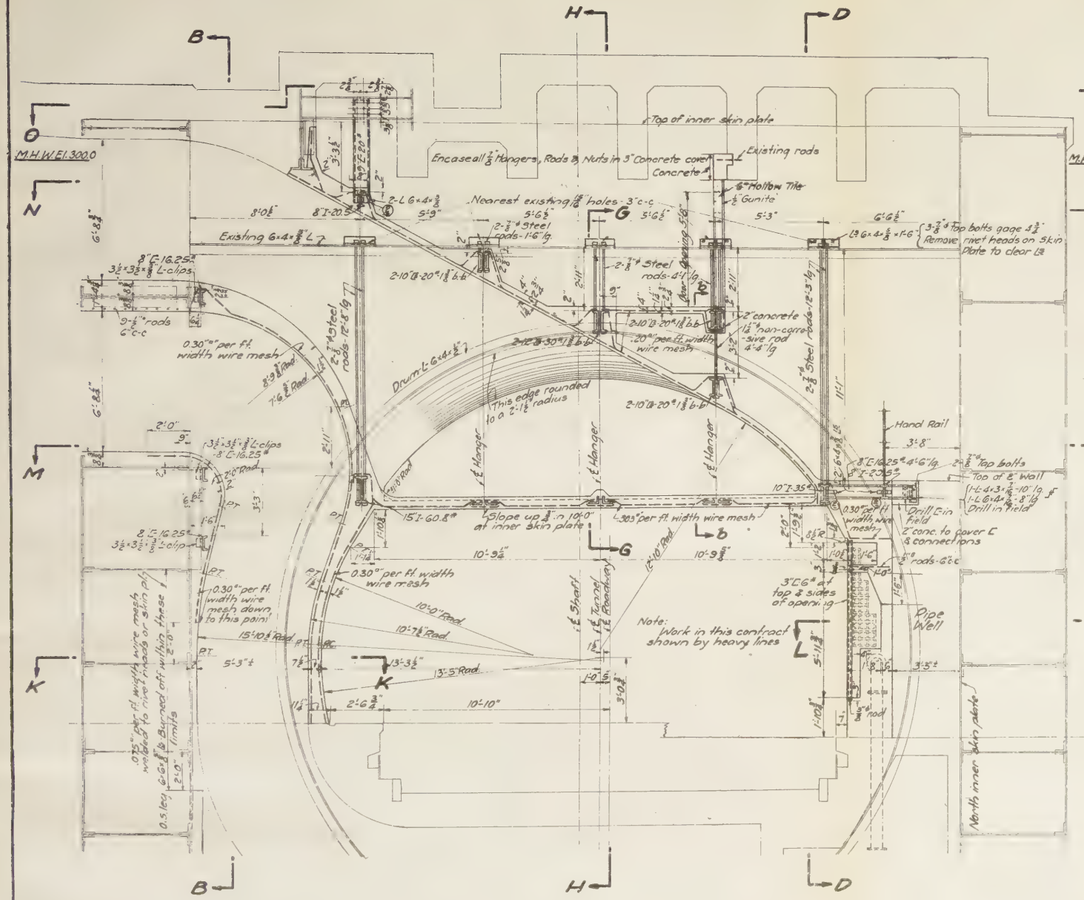
SCALE: 0 1 2 3 FEET

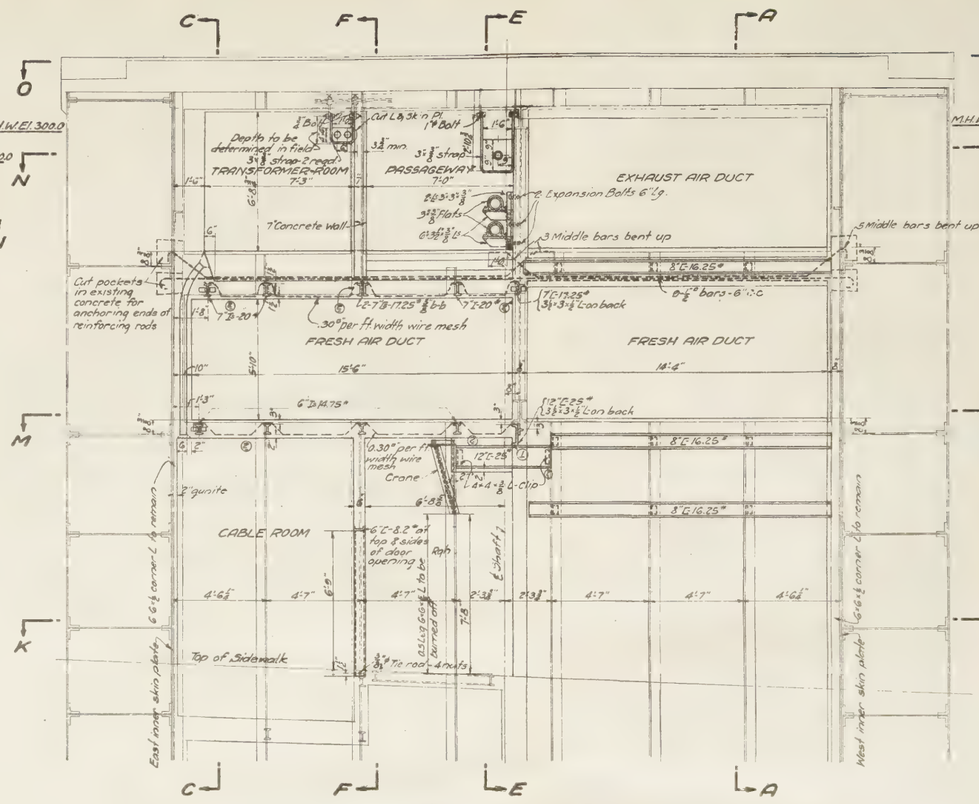
DATE: AUG. 4 1925

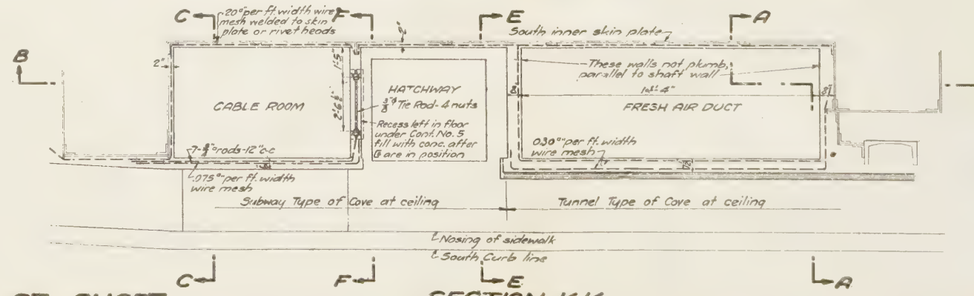
Ole Singstad
CHIEF ENGINEER

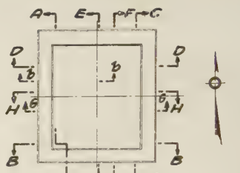
FILE NO. 113

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


M.H.W.El 300.0
Top of inner skin plate
Encase all ⅞" Hangers, Rods & Nuts in 3" Concrete cover
Existing rods
6" Hollow Tile & ½ Gunite
Nearest existing ⅞" holes - 3'-0" c-c
Existing 6-4 x ⅝ L 7
2-L 6 x 4 x ⅝
2-⅞" Steel rods - 4'-1" lg
2-⅞" Steel rods - 11'-6" lg
3½ x 3½ x ⅝ L-clips
8" C 16.25#
2-⅞" Steel rods - 12'-3" lg
2" concrete (1½" non-corrosive wire rod 4'-8" lg
20" per ft. width wire mesh
0.30" per ft. width wire mesh
Drum L 6 x 4 x ⅝
This edge rounded to 2-1½ radius
Hand Rail
E Hanger
Tie Rod
Slope up ⅜" in 10'-0" at inner skin plate
0.30" per ft. width wire mesh
Top of E Wall
Drill E in field & Z cone to cover C & connections
Top bolts
Drill in field
Note: Work in this contract shown by heavy lines
E Shaft
E Ventilating Roadway
Pipe Well
3" C 6.4 at top & sides of opening
0.30" per ft. width wire mesh
0.075" per ft. width wire mesh welded to rivet heads or skin plate
0.5 leg 6 x 6 x ⅝ Bended out when these 2 lines
Drum L
Rod
North inner skin plate
SECTION A-A


M.H.W.El 300.0
Depth to be determined in field
3½ x ⅜ strap (2 req'd)
TRANSFORMER ROOM
PASSAGEWAY
EXHAUST AIR DUCT
Expansion Bolts 6" lg.
7" Concrete Wall
3 Middle bars bent up
5 Middle bars bent up
Cut pockets in existing concrete for anchoring ends of reinforcing rods
30" per ft. width wire mesh
FRESH AIR DUCT
FRESH AIR DUCT
8" C 16.25#
6-⅞" bars - 6'-1" c
T 13.25# Con back
0.30" per ft. width wire mesh
Crane
4 x 4 x ½ L-Clip
2" gunite
CABLE ROOM
6" C 8.2 on top & sides of door opening
Rail
E Shaft
Top of Sidewalk
¾" Tie rod - 4 nuts
East inner skin plate
West inner skin plate
SECTION B-B


20" per ft. width wire mesh welded to skin plate or rivet heads
South inner skin plate
CABLE ROOM
HATCHWAY
¾ Tie Rod - 4 nuts
Recess left in floor under Cont. No. 3. Fill with conc. after G are in position
These walls not plumb, par allel to shaft wall
FRESH AIR DUCT
0.30" per ft. width wire mesh
⅞" rods - 12" c-c
0.075" per ft. width wire mesh
Subway Type of Cove at ceiling
Tunnel Type of Cove at ceiling
℄ Nosing of sidewalk
℄ South Curb line
SECTION K-K



Note:-
All ⅞" Steel Hanger rods to have at each end 1-nut and 1½ thick washer. Rods threaded 3" Threads to be checked to prevent nuts from turning.

All non-corrosive metal hanger rods to have at each end 1-non-corrosive metal nut 1½" thick 3" Dia. N.C. washer, beveled where shown. Rods threaded 3". Threads to be checked to prevent nut from turning.

All pairs of L's & ⊏'s to be separated by 3" diam. washers and stitch rivets about 3'-0" c-c These to be staggered in pairs of ⊏'s & L's.

Hanger rods except in Ventilation Ducts to be wrapped with .075" per ft. width wire mesh and encased in concrete 3" thick.

Use ⅞ rivets unless otherwise specified.

① Denotes number of field rivets used ② number of shop rivets.

③ Denotes number of 15/16" holes to be drilled after erection. Open holes ⅞ unless otherwise specified

2" Concrete cover on skin plates is to be reinforced with .075" per ft. width wire mesh welded to skin plate or rivet heads unless otherwise noted.

Concrete cover on steel beams and angles is to be 2" thick and reinforced by wrapping the member with .075" per ft. width wire mesh.

Minimum distance between high tension conduits and reinforcing steel 6"

Interior surface of air ducts to be finished concrete.

Rph Denotes surface of concrete to be roughened for securing tile.

On North and South Inner Skin Plates, where 2" Concrete Cover is shown, 0.5 leg of existing 6"x6"x⅝" vertical L's to be burned off.

Beam Wrappers under all Floor Beams

REFERENCE NOTES

For Sections C-C, D-D & L-L	See Contract Dwg. No. 112,	File 1-13
" " E-E & FF	" " "	" 116,	" 1-13
" Section E-G, bb,	" " "	" 118,	" 1-13
" Sections H-H & O-O	" " "	" 117,	" 1-13
" " M-M & N-N	" " "	" 115,	" 1-13

NEW YORK STATE BRIDGE & TUNNEL COMMISSION
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THE HOLLAND TUNNEL

CONTRACT No. 13

CONTRACT DRAWING No. 113

SCALE: 0 1 2 3 FEET

DATE AUG 4 1925

Patrick Smith
ENGINEER OF DESIGNS

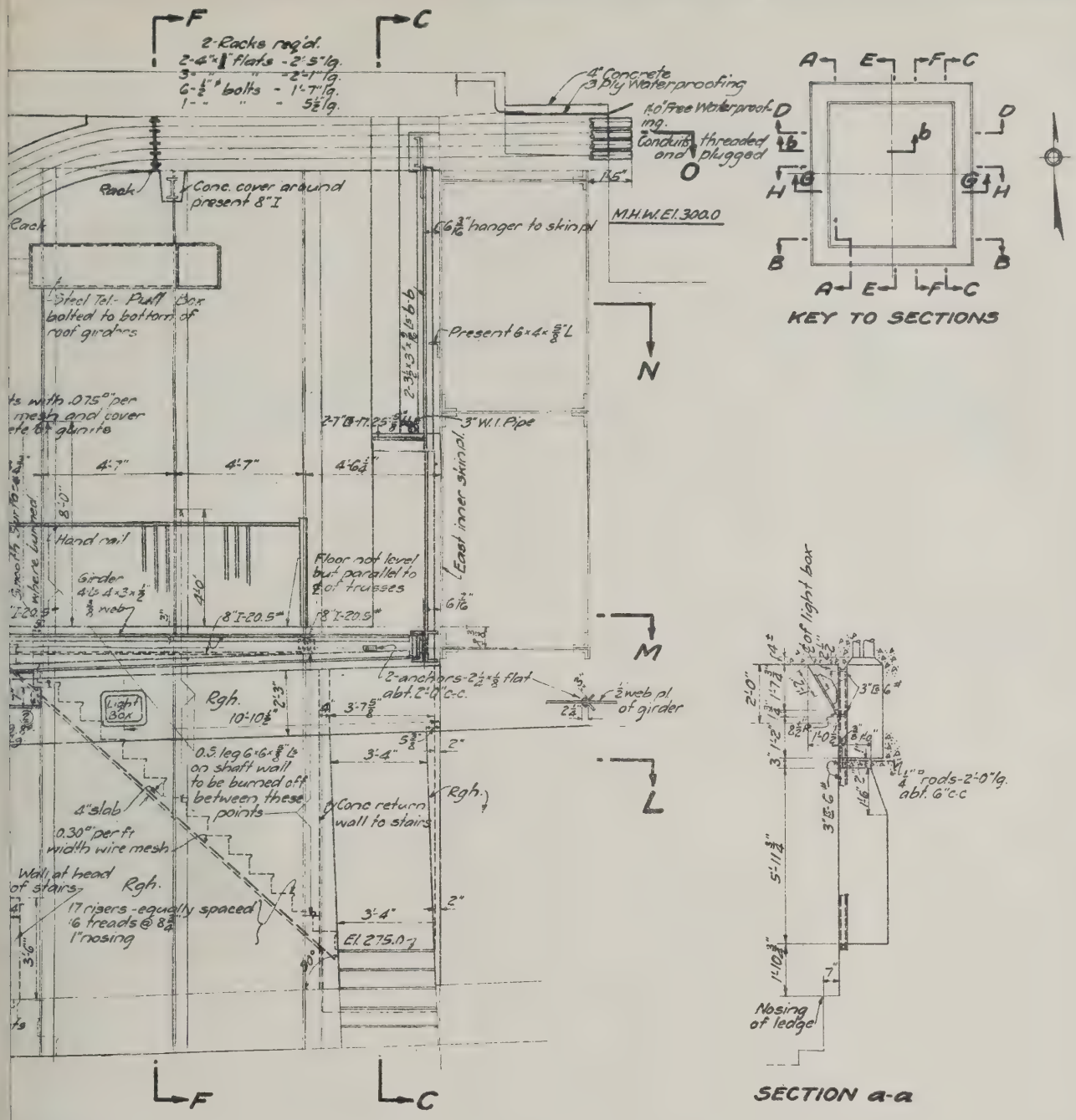
Ole Singstad
CHIEF ENGINEER

DRAWN BY O.F.B.
CHECKED BY J.H.K. & P.P.K.

FILE NO. 113

INTERIOR SPRING ST. SHAFT

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



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NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 114

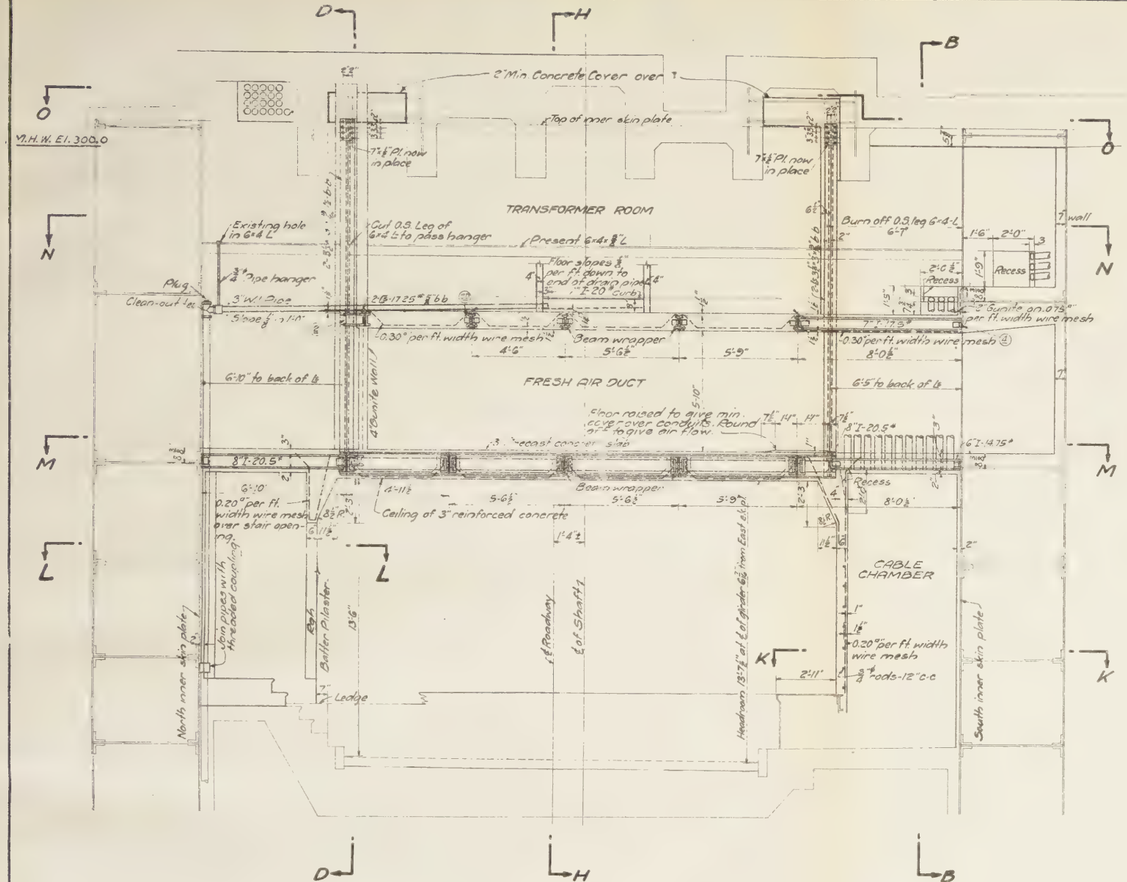
SCALE: 0 1 2 3 FEET

DATE: AUG. 4, 1925

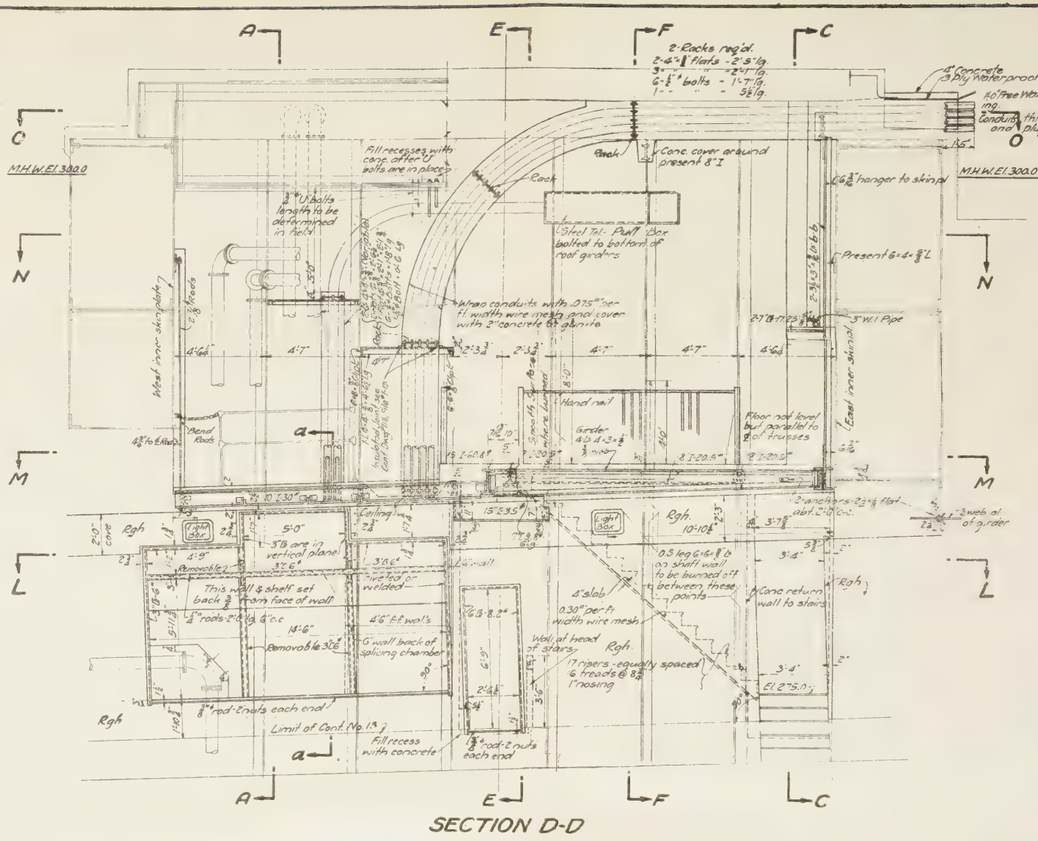
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

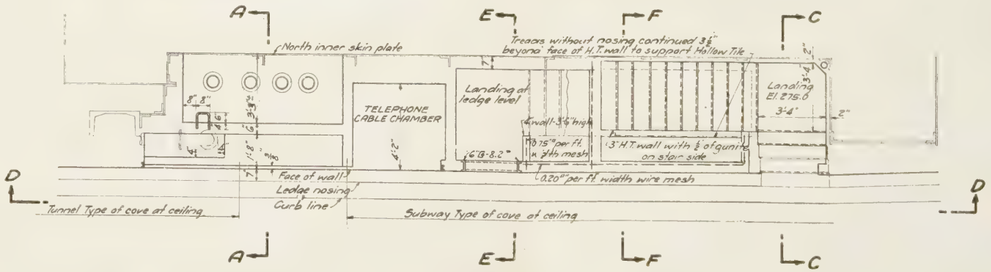
M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


2" Min. Concrete Cover over
Top of inner skin plate
7⅛" Pl. now in place
TRANSFORMER ROOM
Existing hole in G-4 L
Cut 0.8 Leg of G-4 L to clear hanger
Present G-4-8" L
¾" pipe hanger
3" W.I. Pipe
Plug
Clean-out tee
2 B 17.25* ⅝ bb
0.30* per ft. width wire mesh
Beam wrapper
FRESH AIR DUCT
6'-10" to back of lb
Floor raised to give min. cover conduits. Round corners to improve air flow
3" cast concrete slab
Ceiling of 3" reinforced concrete
0.20" per ft. width wire mesh over stair opening
Butler Plaster
Ledge
North inner skin plate
Join welded
Burn off 0.9 leg G-4-L
Present G-4-8" L
Floor slopes ¼" per ft. down to end of drain pipe
Recess
Cut to fit on 0.75" per ft. width wire mesh
6'-5" to back of lb
CABLE CHAMBER
0.20" per ft. width wire mesh
⅜" rods-12" c-c
South inner skin plate
Headroom 13'-7½" at Lo. Water
Roadway
Shaft
M.H.W. El. 300.0

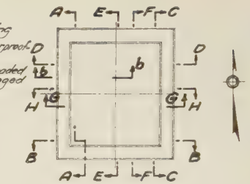
SECTION C-C

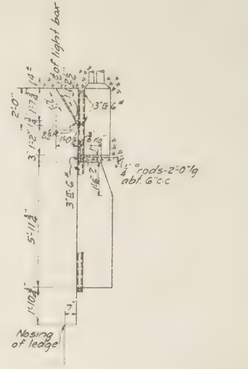

2 Racks rig'd.
2-6-⅞" flats - 2'-8" lg.
3- " - 2'-4" lg.
6-⅞" bolts - 1'-7" lg.
1- " - 5⅛" lg.
Fill recesses with conc. after bolts are in place
Rack
Conc. cover around present 8" I
U bolts length to be determined in field
3" Steel Tr. Purl. Bar bolted to bottom of roof girders
Conduits with 0.75" per ft. width wire mesh and cover with 2" concrete & gunite
Present G-4-8" L
3" W.I. Pipe
Hand rail
Girder
Floor not level but parallel to bot. of trusses
East inner skin plate
West inner skin plate
Bend Rods
Ceiling
5'-0" vertical plane
This wall & shelf set back 3" from face of wall
⅝" rods-2'-0" lg. 6" c-c
Removable
4'-6" F.F. wall's
6" wall back of splicing chamber
Limit of Cont. No. 13
Fill recess with concrete
⅝" rod-2 nuts each end
8" slab
0.30" per ft. width wire mesh
Wall at head of stairs
7 risers equally spaced
6 treads @ 8½" Tnosing
Cone return wall to stairs
0.5 leg G-6-8.2 lb on shaft wall to be burned off between these points
Rgh
Lgh
El 275.0
Concrete & 3 ply Waterproofing
10 Tree Waterproofing
Conduits threaded and plugged
M.H.W. El. 300.0

SECTION D-D


North inner skin plate
Treads without nosing continued 3½" beyond face of H.T. wall to support Hollow Tile
TELEPHONE CABLE CHAMBER
Landing at lodge level
Landing El 275.0
4" wall-3'-6" high
0.75" per ft. x ¾th mesh
3'-H.T. wall with ¾ of gunite on stair side
6 G-8.2 lb
0.20" per ft. width wire mesh
Face of wall
Lodge nosing
Curb line
Tunnel Type of cove at ceiling
Subway Type of cove at ceiling

SECTION L-L





SECTION a-a

REFERENCE NOTES

For Sections	A-A, B-B & K-K, see Contr. Dwg. No.	113	File	1-13
" "	E-E & F-F " " "	116	"	1-13
" "	H-H & O-O " " "	117	"	1-13
" "	M-M & N-N " " "	115	"	1-13
"	Additional Details " " "	118	"	1-13

DRAWN BY S.R.D. ENGINEER OF DRAWING
CHECKED BY J.R.K. S.P.K.

INTERIOR SPRING ST. SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 114

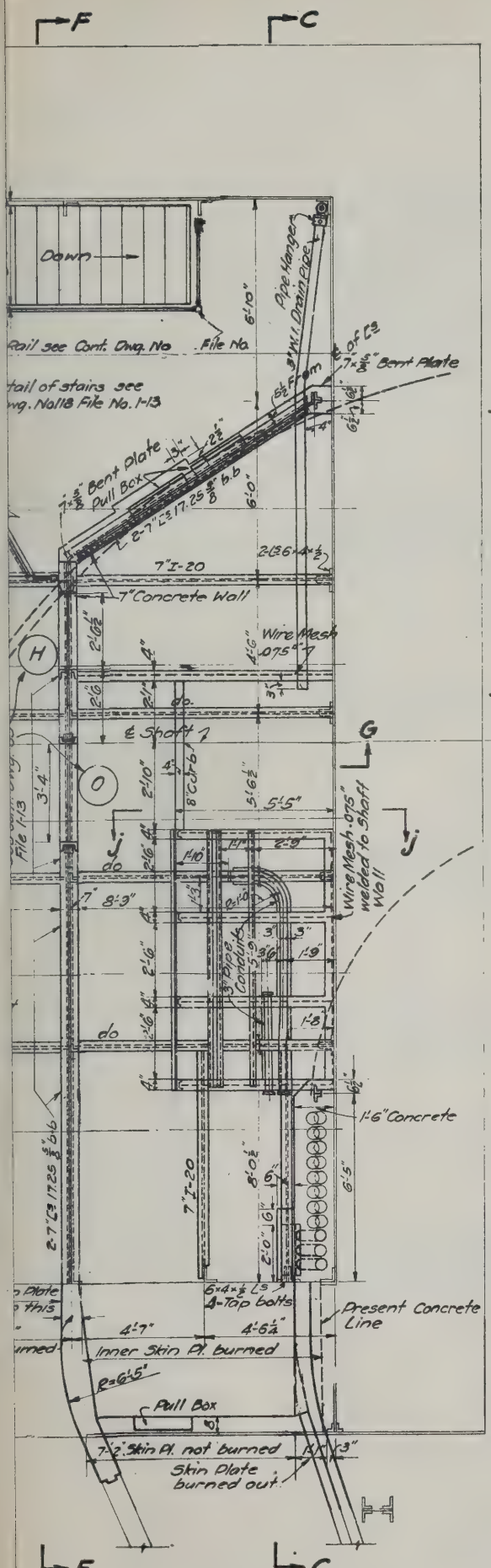
SCALE: FEET

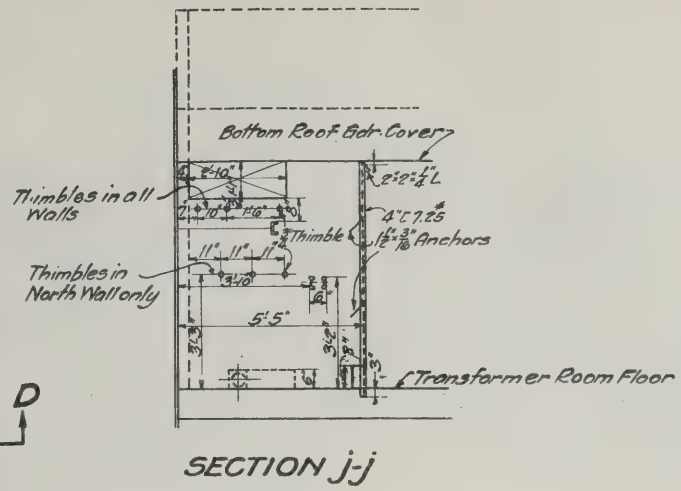
DATE: AUG. 4, 1925

CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.





SECTION j-j

REFERENCE NOTES.

For Sections	A-A & B-B,	see Contract Dwg. No.	113,	File	1-13
" "	C-C & D-D	" " "	114,	"	1-13
" "	E-E & F-F	" " "	116,	"	1-13
" "	G-G, b-b, c-c & d-d	" " "	118,	"	1-13
" Section	H-H	" " "	117,	"	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 115

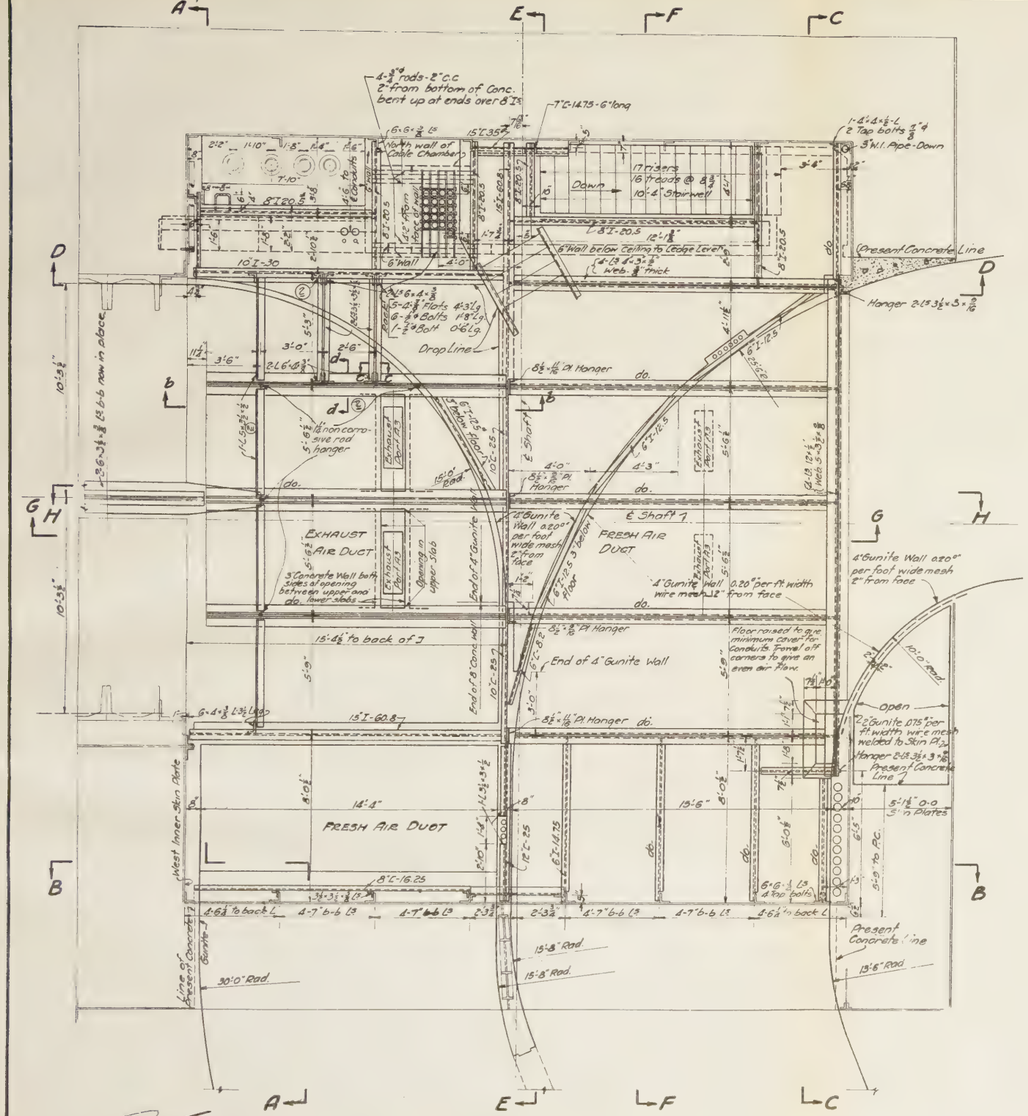
SCALE: 0 1 2 3 FEET

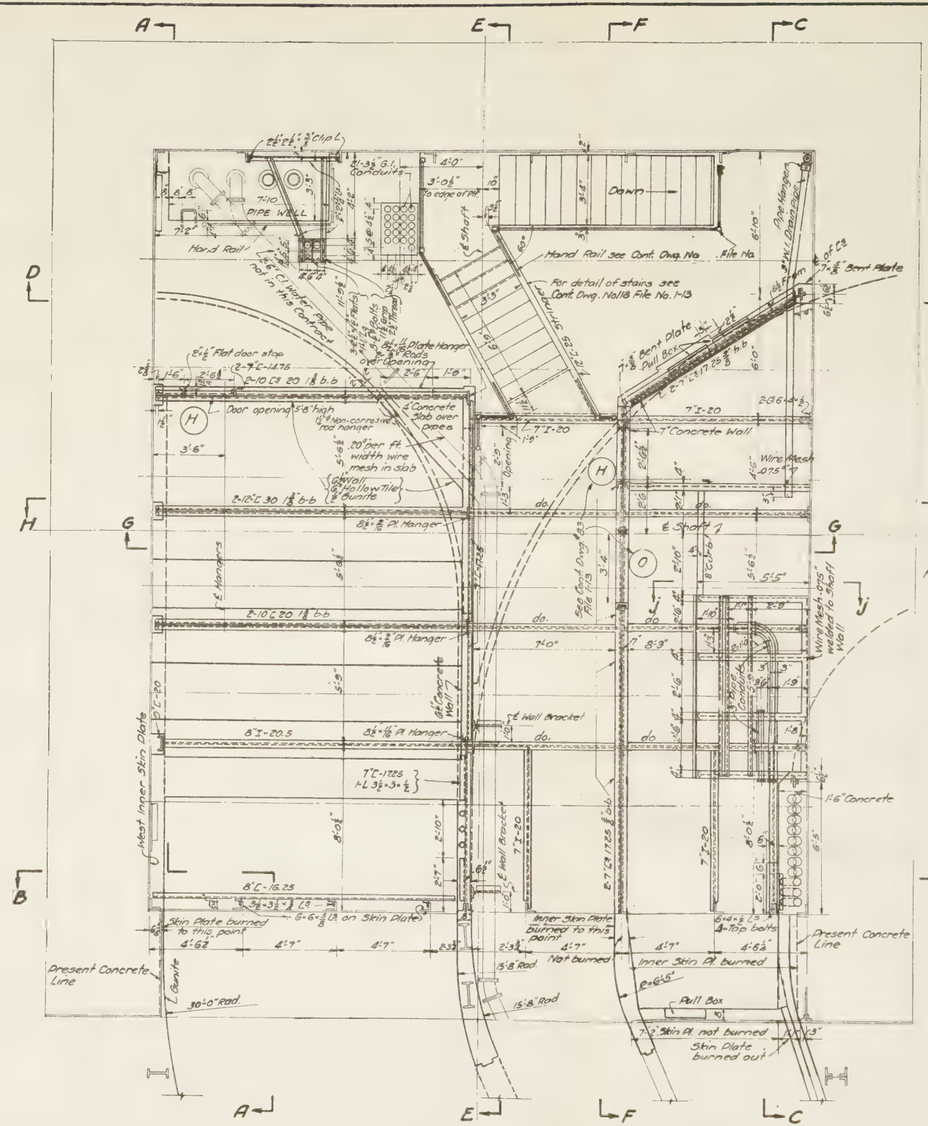
DATE: AUG 4, 1925

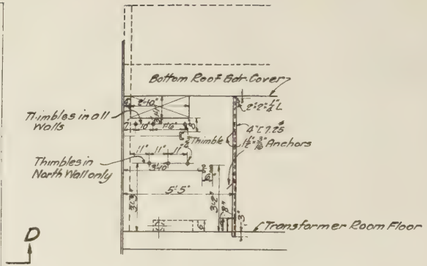
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


EXHAUST AIR DUCT
FRESH AIR DUCT
FRESH AIR DUCT
End of 4" Gunite
End of 8" Cond. Wall
West Inner Skin Plate
Present Concrete Line
Line of Present Concrete Bench
Drop Line
Hanger 2-L 3½×3×5/16
8" Wall below Ceiling to Ledge Level
Present Concrete Line
4" Gunite Wall 020" per foot wide mesh 2" from face
4" Gunite Wall 020" per foot wide mesh 2" from face
4" Gunite Wall .020 per ft. width wire mesh 12" from face
End of 4" Gunite Wall
Floor raised to give minimum clear for Conduits. Travel of camera to give an even air flow.
Present Concrete Line
Present Concrete Line
30'-0" Rad.
15'-8" Rad.
15'-8" Rad.
15'-8" Rad.
SECTION M-M





REFERENCE NOTES

For Sections A-A & B-B,	see Contract Dwg. No. 113,	File 1-13
" " C-C & D-D	" " " 114,	" 1-13
" " E-E & F-F	" " " 116,	" 1-13
" " G-G, b-b, c-c & d-d	" " " 118,	" 1-13
" Section H-H	" " " 117,	" 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 15
CONTRACT DRAWING No. 115

SCALE: 0 1 2 3 FEET

DATE: AUG 4, 1925

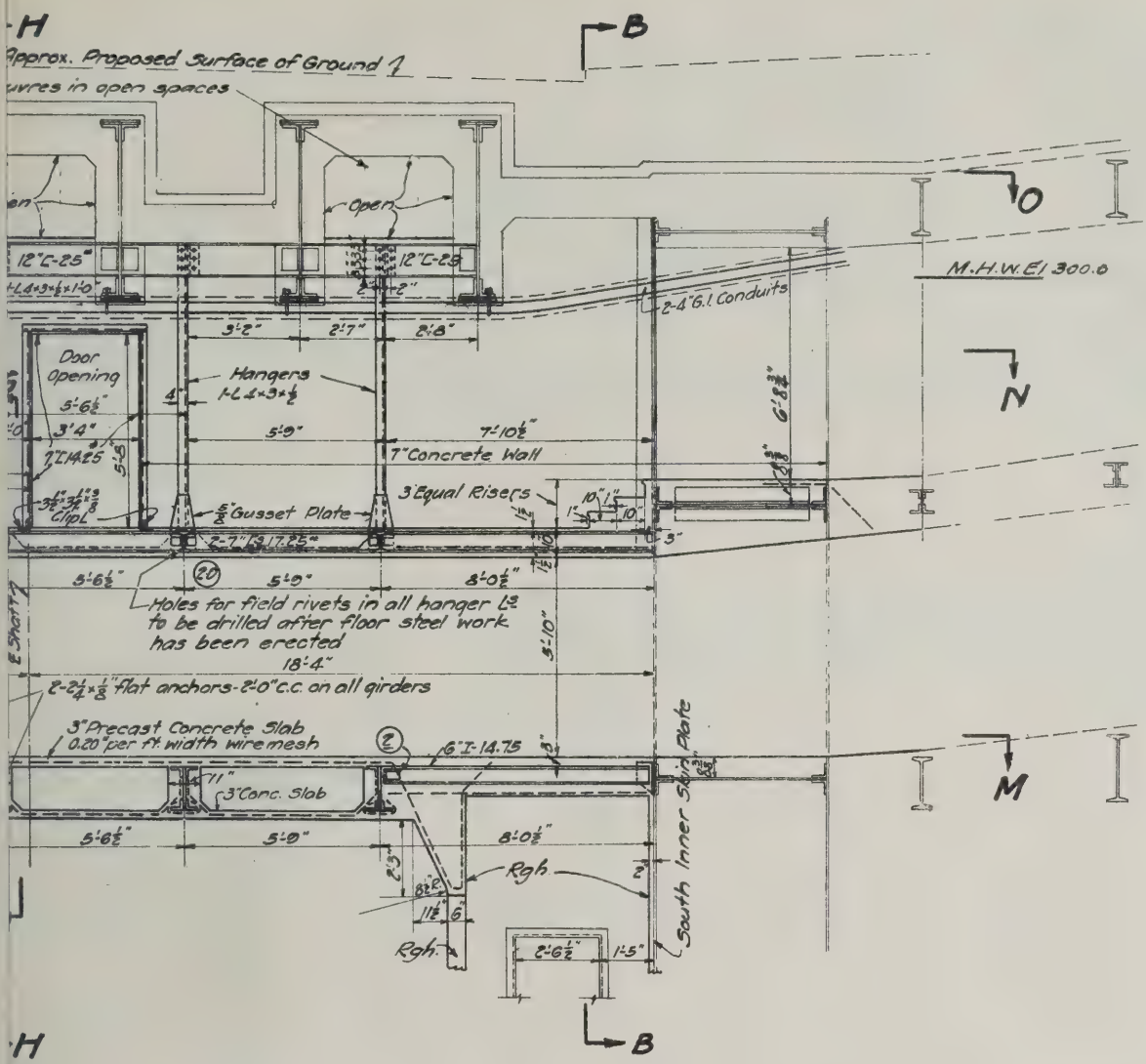
CHIEF ENGINEER

FILE NO. 1-13

DRAWN BY O.F.B.
CHECKED BY R.H. & P.P.K.

INTERIOR SPRING ST. SHAFT.

M. B. Brown Printing & Binding Co.,



H

B

H

ION F-F

3, File 1-13
2, " 1-13
9, " 1-13
7, " 1-13
, " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 116

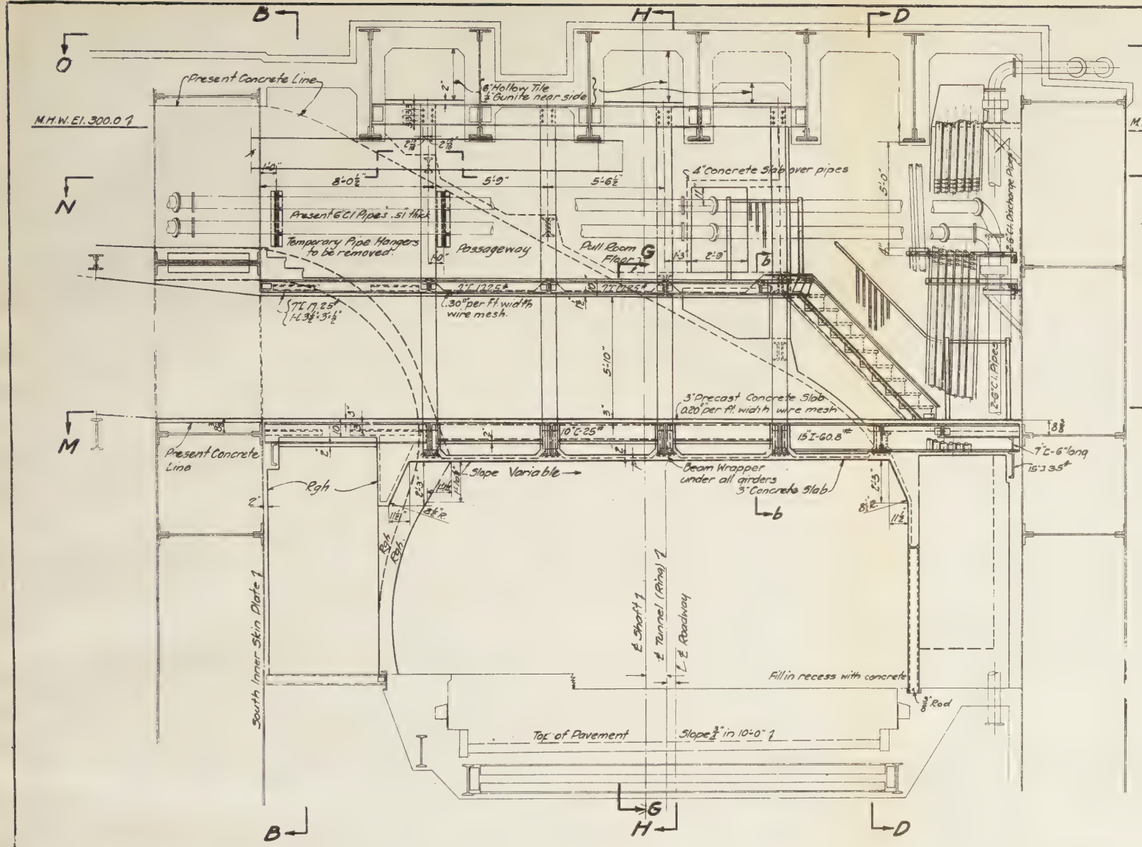
SCALE: 0 1 2 3 FEET

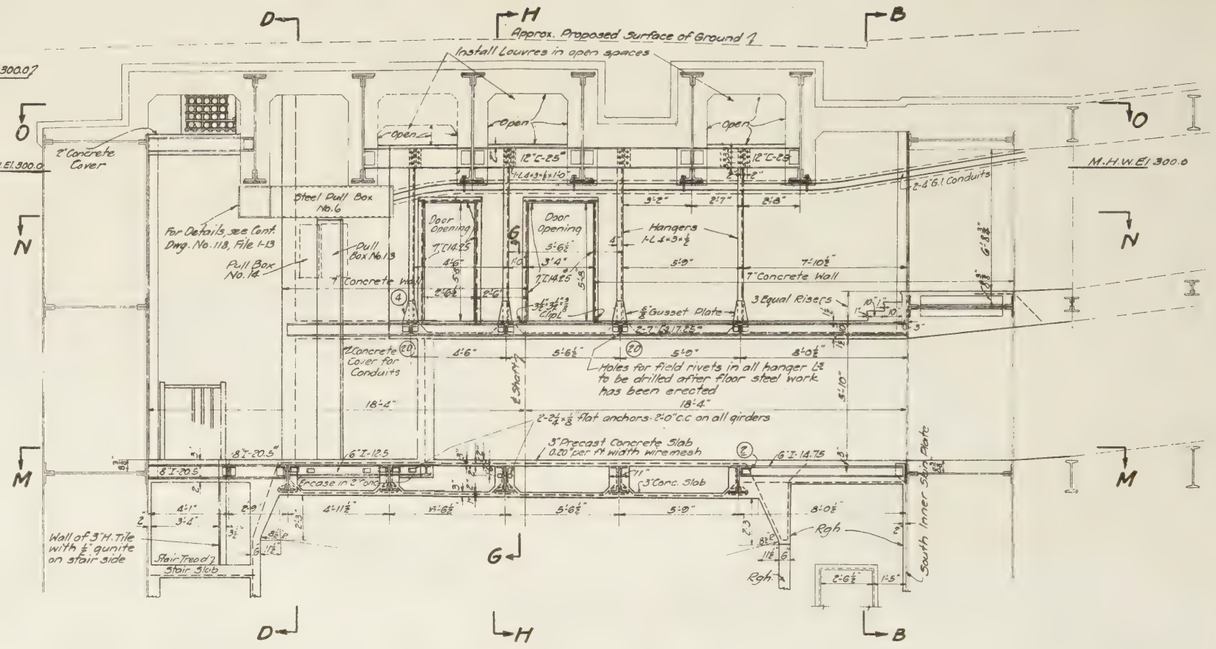
DATE: AUG. 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.




Approx. Proposed Surface of Ground
Install Louvres in open spaces
M.H.W.El.300.0
2" Concrete Cover
Steel Pull Box No.6
For Details, see Cont. Dwg. No. 118, File 1-13
Pull Box No.13
Pull Box No.14
7" Concrete Wall
Door Opening
Hangers
3 Equal Risers
Gusset Plate
Concrete Cover for Conduits
Holes for field rivets in all hanger Lgs to be drilled after floor steel work has been erected
2-2 1/4" Ø Flat anchors 2'-0" c.c. on all girders
3" Precast Concrete Slab 0.20 per ft. width wire mesh
3" Conc. Slab
Increase in 2" conc.
Wall of 3" H. Tile with 1/2" gunite on stair side
Stair Tread
Stair Slab
2-4"ø C.I. Conduits
South Inner Skin Plate
SECTION F-F

REFERENCE NOTES

For Section B-B	see Contract Dwg. No. 113,	File 1-13
" " D-D	" " " 112,	" 1-13
" Sections G-G & b-b	" " " 118,	" 1-13
" H-H & O-O	" " " 117,	" 1-13
" M-M & N-N	" " " 115,	" 1-13

INTERIOR SPRING ST. SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 116

SCALE: 0 1 2 3 FEET

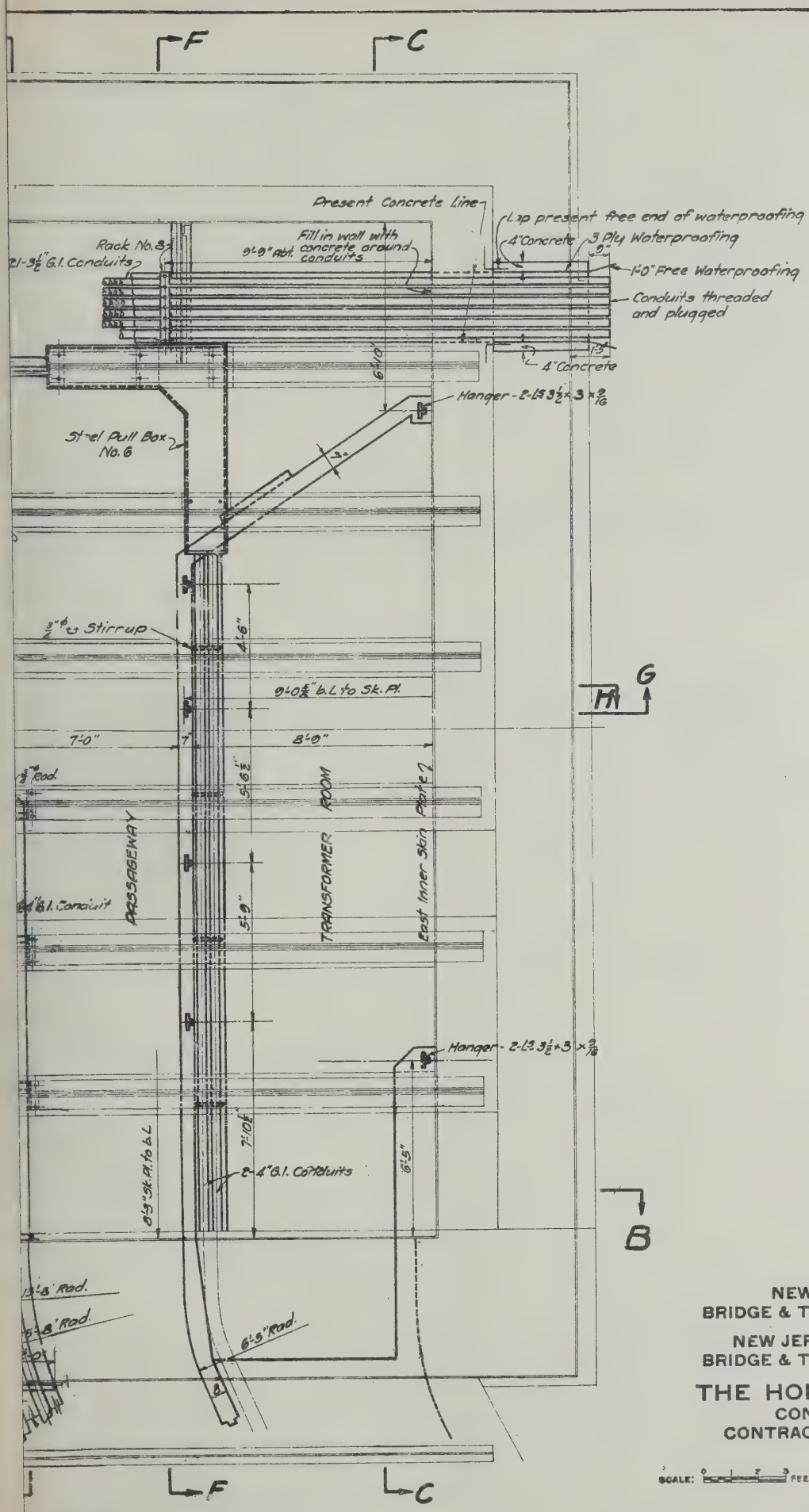
DATE: AUG 4, 1925

DRAWN BY O.T.O
CHECKED BY J.S.K. & P.H.

CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street N. Y.



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 117

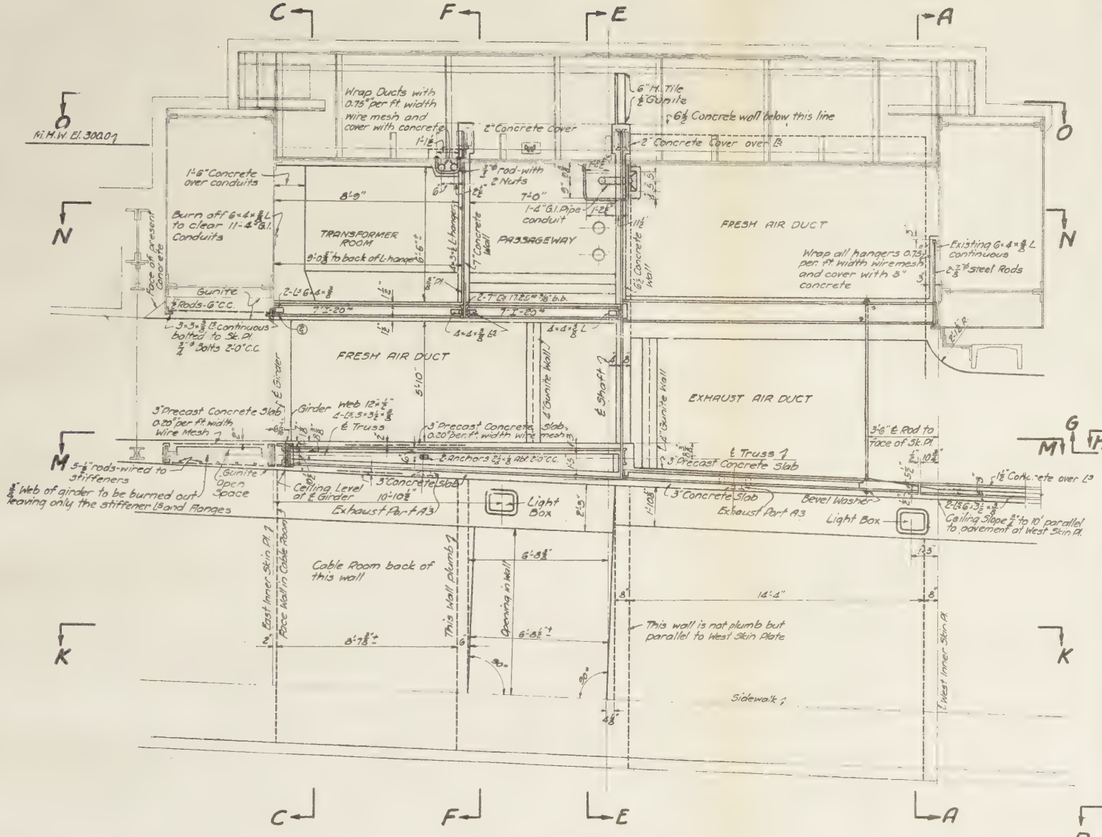
SCALE: 0 1 2 3 FEET

DATE: AUG. 4, 1925

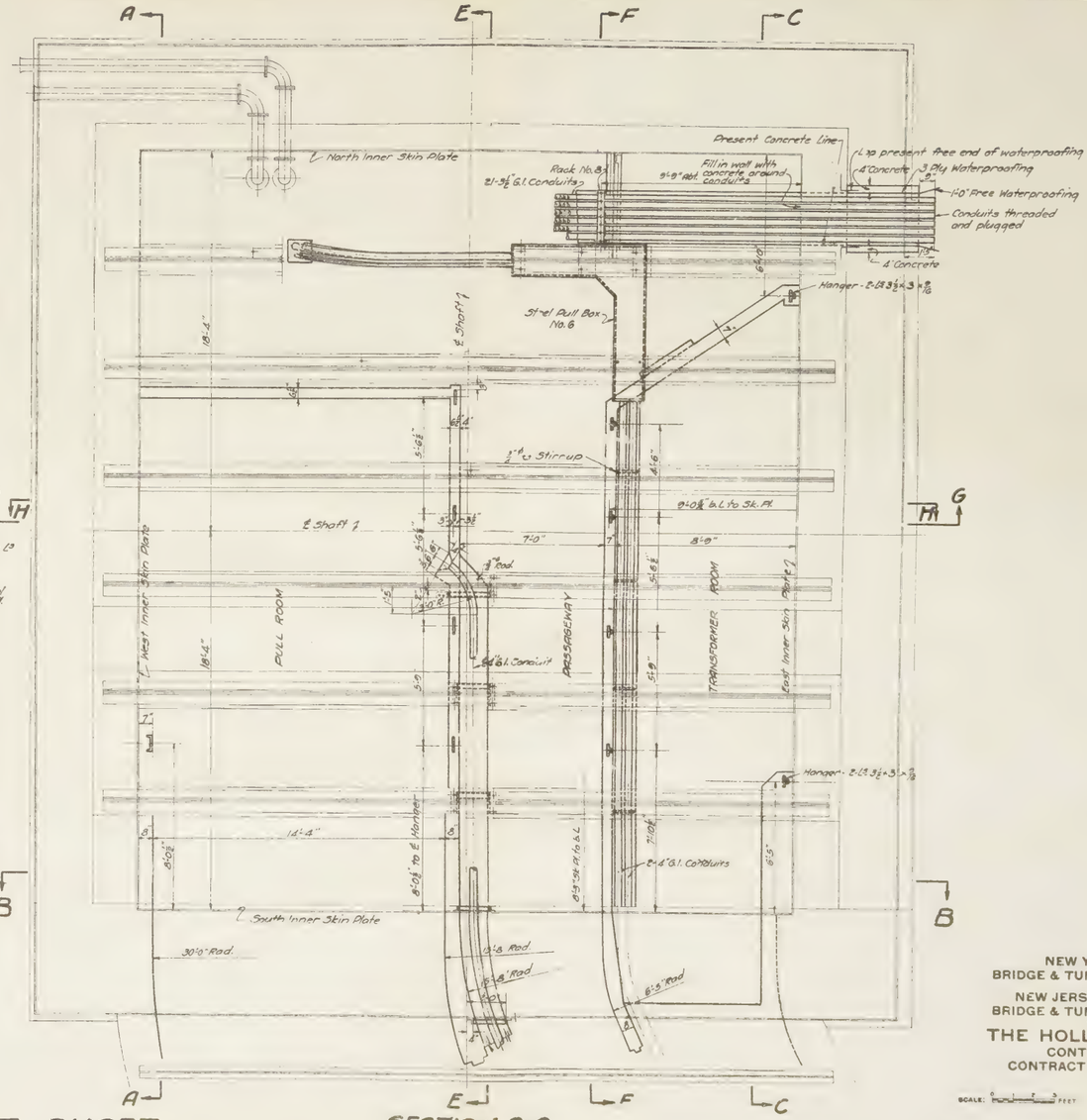
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


C
F
E
A
O
N
M
K
B
G
H
Wrap Ducts with 0.75# per ft. width wire mesh and cover with concrete
6" M. Tile & Gunite
6½ Concrete wall below this line
2" Concrete Cover
3" Concrete Cover over B
1'-6" Concrete over conduits
TRANSFORMER ROOM
9'-10⅜" to back of L hanger
8'-9"
Burn off 6"x4"x⅝" L to clear 11-2" G.I. Conduits
Gunite
¾" Rods-6'-0" C.C.
PASSAGEWAY
FRESH AIR DUCT
EXHAUST AIR DUCT
Existing 6"x4"x⅝" L continuous
2-⅞" Steel Rods
Wrap all hangers 0.75# per ft width wire mesh and cover with 3" concrete
3" Precast Concrete Slab 0.20" per ft width Wire Mesh
Girder Web 12"x⅜" 4-15"x3½"x⅝" E Truss
3" Precast Concrete Slab 0.20" per ft width wire mesh
Gunite Space
Ceiling Level of E Girder
Exhaust Part A3
Light Box
Bevel Washer
Ceiling Slope 2" to 10" parallel to pavement of West Skin Pl.
Cable Room back of this wall
This wall plumb
Opening in wall
This wall is not plumb but parallel to West Skin Plate
Sidewalk
East Inner Skin Pl.
West Inner Skin Pl.
E Shaft
E Truss
E Girder
4" Gunite Wall
Fill in Face Wall to Cable Room
5'-10"
14'-4"
6'-6⅝"
6'-7⅞"
Hi H.W. El. 300.0
5'-6" E Rod to face of Sk. Pl.
1⅛" Concrete over C
3" Precast Concrete Slab
Exhaust Part A3
2-⅝" G Bolts
3'-0" C.C.
Anchors 2½"x⅜" Abt 2'-0" C.C.
5'-⅜" rods wired to stiffeners
⅜" Web of girder to be burned out leaving only the stiffener Board flanges

SECTION H-H



SECTION O-O

REFERENCE NOTES.

For Sections	A-A, B-B & K-K,	see	Contract	Dwg. No. 113,	File	1-13
" "	C-C & D-D	"	"	" 114,	"	1-13
" "	E-E & F-F	"	"	" 116,	"	1-13
" "	H-H & O-O	"	"	" 117,	"	1-13
" "	M-M & N-N	"	"	" 115,	"	1-13
For additional Details & Section G-G				" 118,	"	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 15
CONTRACT DRAWING No. 117

SCALE: 1" = 3 FEET

DATE: AUG. 4, 1925

Ole Singstad
CHIEF ENGINEER

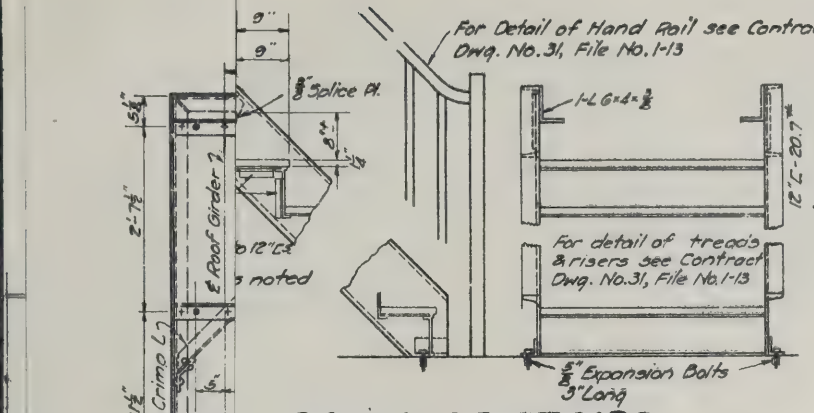
FILE NO. 1-13

Ingrid Sundin
ENGINEER OF DESIGNS

DRAWN BY GRB
CHECKED BY JAK & P.P.K.

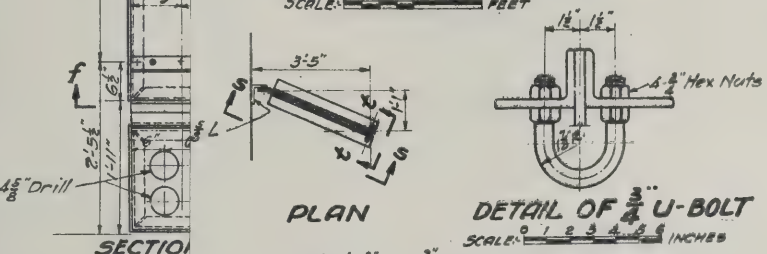
INTERIOR SPRING ST. SHAFT

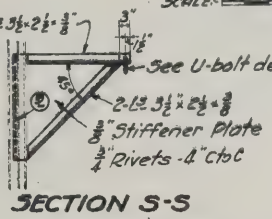
M. B. Brown Printing & Binding Co.,


For Detail of Hand Rail see Contract Dwg. No. 31, File No. 1-13
For detail of treads & risers see Contract Dwg. No. 31, File No. 1-13
Expansion Bolts 3" Long

DETAIL OF STAIRS

SCALE: 0 1 2 3 FEET

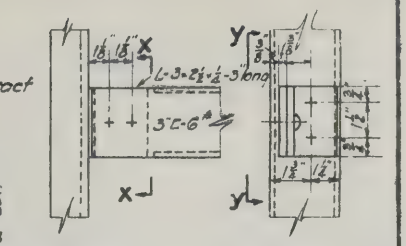


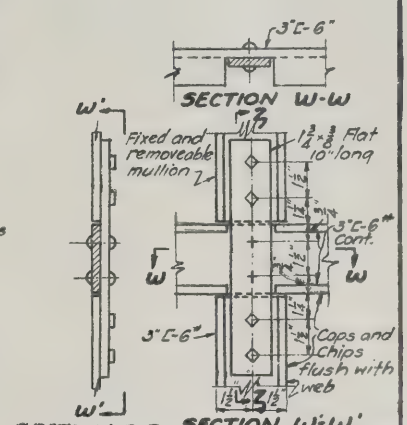


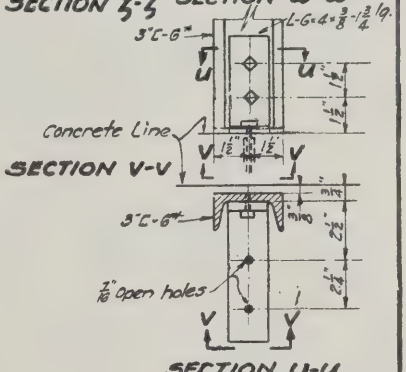
SECTION S-S

Detail of Crane over Hatchway for Spring St. Shaft (Opposite hand for Canal St. Shaft.)

SCALE: 0 1 2 3 FEET







+ Denotes 7/8" rivet
◊ Denotes 7/8" Tap bolt - 3/4" long

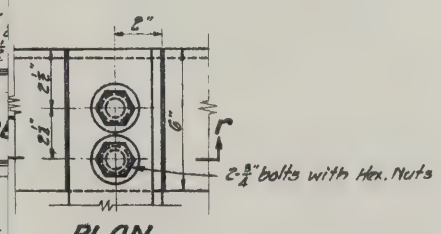
SCALE: 0 1 2 3 4 5 INCHES

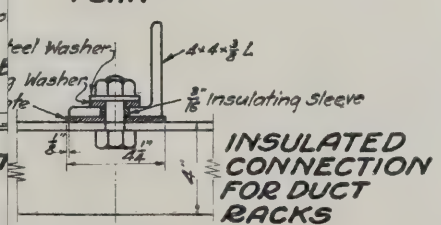
DETAILS L.T. SPLICING CHAMBER.

REFERENCE NOTES

For Horizontal & Vertical Sections, Interior Spring St. Shaft see Contract Dwgs. Nos. 113 to 117 incl. File No. 1-13

For Horizontal & Vertical Sections, Interior Canal St. Shaft see Contract Dwgs. Nos. 119 to 123 incl. File No. 1-13





SECTION r-r

SCALE: 0 1 2 3 4 5 6 INCHES

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 118

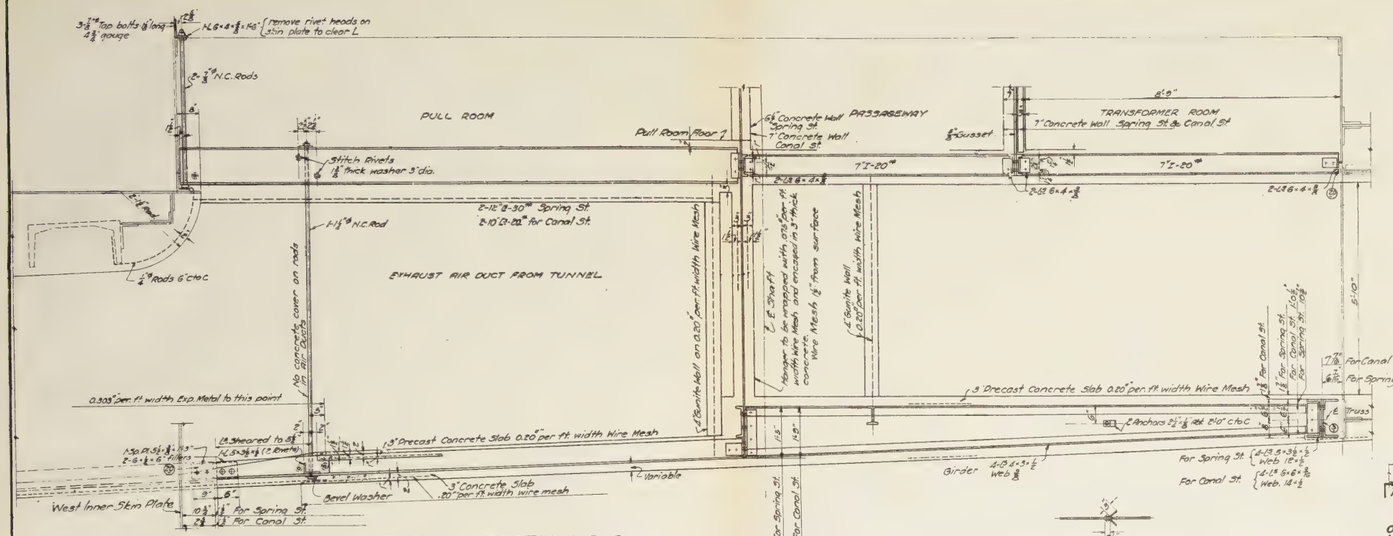
SCALE: AS SHOWN

DATE: AUG. 4, 1926

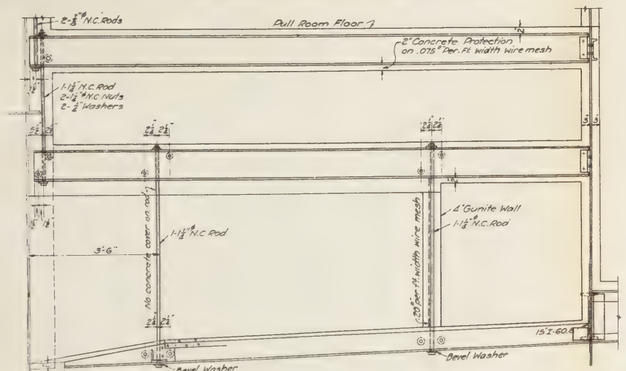
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

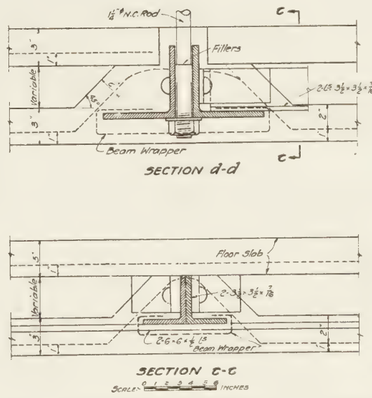
M. B. Brown Printing & Binding Co
37-41 Chambers Street, N. Y.



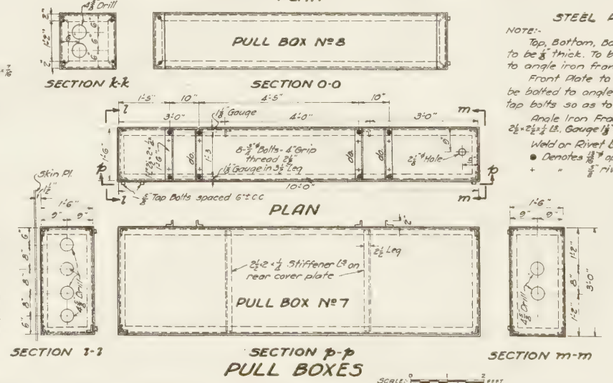
TYPICAL SECTION G-G
FOR SPRING ST SHAFT AND CANAL ST. SHAFT



TYPICAL SECTION b-b FOR SPRING ST.



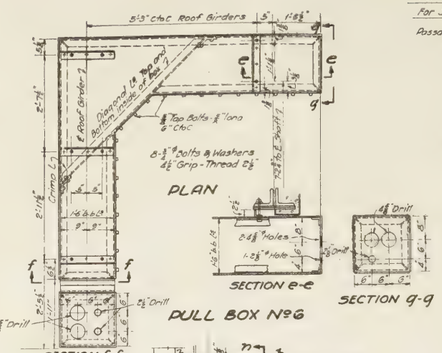
SECTION d-d
SECTION c-c

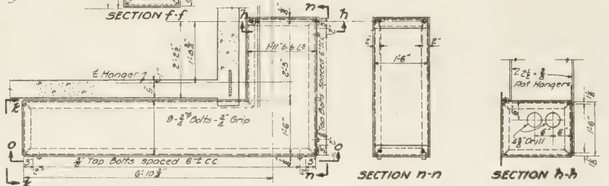


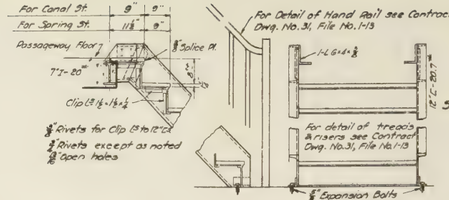
SECTION k-k
SECTION o-o
SECTION j-j
SECTION p-p
SECTION m-m
PULL BOXES

STEEL PULL BOXES

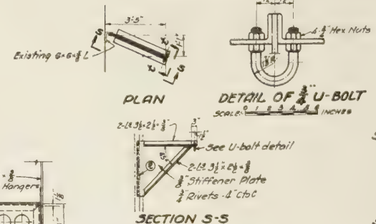
NOTE:-
Top, Bottom, Back and End Plates to be ¼" thick. To be riveted or welded to angle iron frames. Rivets or Welds @ 6" c.c.
Front Plate to be ⅜" thick and to be bolted to angle iron frame with tap bolts so as to be removable.
Angle Iron Frames for Pull Boxes 2½"×2½"×¼" L3. Gauge ½" unless otherwise noted.
Weld or Rivet L3 at all corners
● Denotes ⅞" open holes
+ " ⅞" rivets

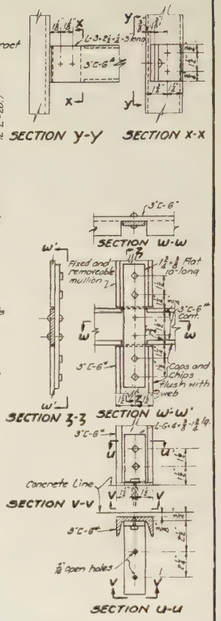





For Canal St.
For Spring St.
Passageway Floor
Clip L3 4"×4"×½"
For Detail of Hand Rail see Contract Dwg. No. 31, File No. 1-13
For detail of treads & risers see Contract Dwg. No. 31, File No. 1-13
Expansion Bolts 3" Long

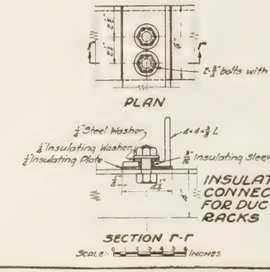
DETAIL OF STAIRS





REFERENCE NOTES
For Horizontal & Vertical Sections, Interior Spring St. Shaft see Contract Dwgs. Nos. 113 to 117 incl. File No. 1-13.
For Horizontal & Vertical Sections, Interior Canal St. Shaft see Contract Dwgs. Nos. 119 to 123 incl. File No. 1-13.

DETAILS L.T. SPLICING CHAMBER



INSULATED CONNECTION FOR DUCT RACKS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

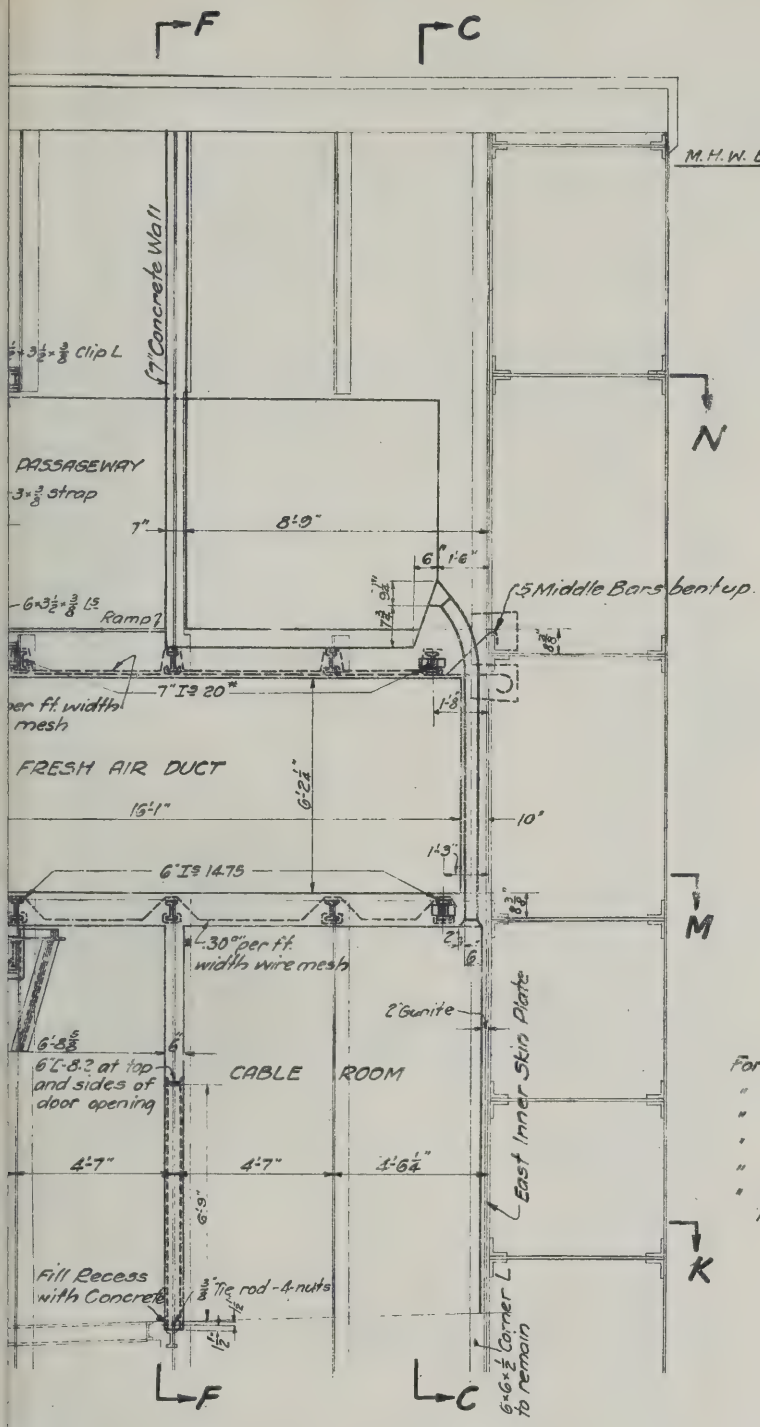
THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 118

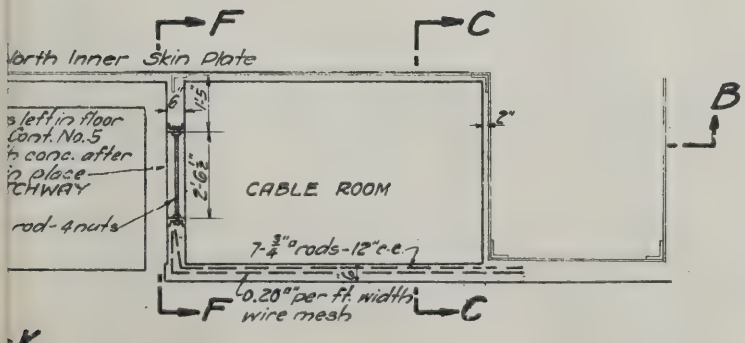
INTERIOR SPRING ST. SHAFT AND CANAL ST. SHAFT

SCALE: AS SHOWN
DATE: AUG 4, 1920
CHIEF ENGINEER
FILE NO. 1-13

DRAWN BY: PNK
CHECKED BY: O.H.A. P.N.K.

M. B. Brown Printing & Binding Co
37-41 Chambers Street, N. Y.





REFERENCE NOTES

For General Notes	see Contract	Dwg. No. 113,	File No. 1-13
" Sections C-C, D-D & L-L	"	" " 120	" " 1-13
" " E-E & F-F	"	" " 122	" " 1-13
" " G-G & O-O	"	" Dwgs. No. 123	File No. 1-13
" " M-M & N-N	"	" Dwg. No. 121	File No. 1-13
" Typical Section G-G and Additional Details	"	" " 118,	" 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 119

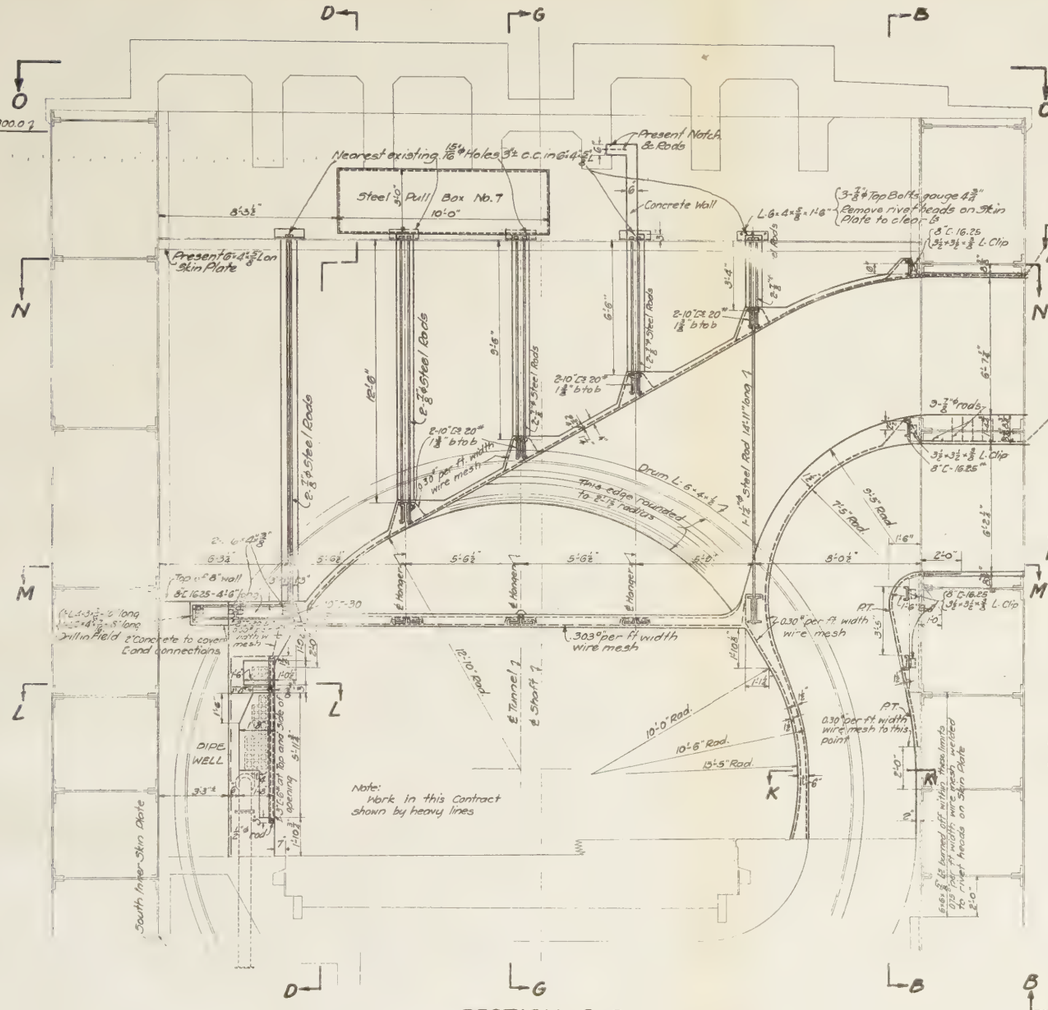
SCALE: 0 1 2 3 FEET

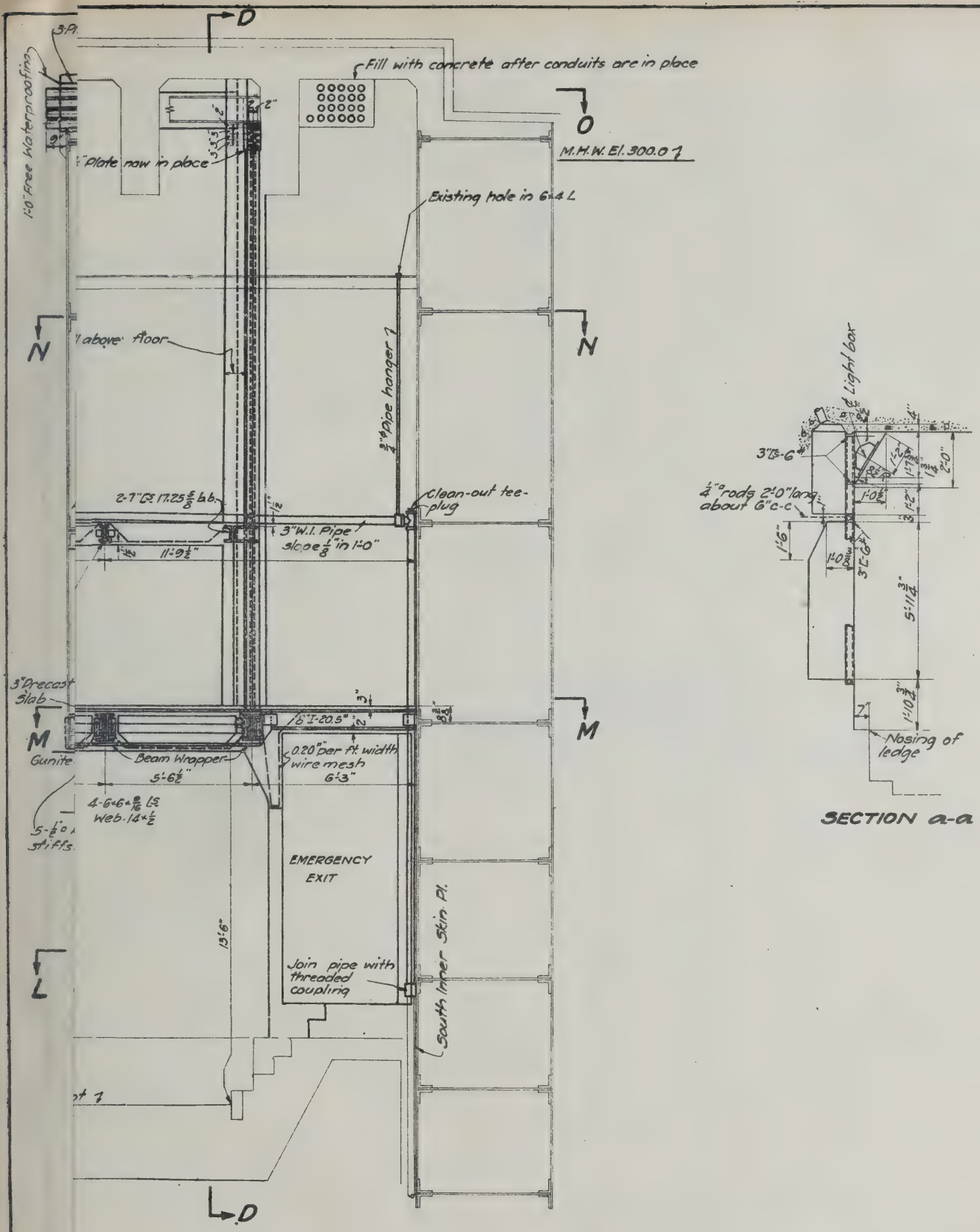
DATE: AUG 4 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.
37-41 Chambers Street, N. Y.


M.H.W. El. 300.0?
Nearest existing 15/16" Holes 3'± c.c. in 6"x4"x5/8" L
Present Notch & Rods
Steel Pull Box No. 7
10'-0"
Concrete Wall
L 6"x4"x5/8"x1'-6"
(3-7/8" Top Bolts + gouge 4 3/8" Remove rivet heads on Skin Plate to clear L)
(8"C 16.25 3 1/2"x3 1/2"x5/8" L Clip)
Present 6"x4"x5/8" L on Skin Plate
8'-3 1/2"
12'-6"
6'-6"
3'-4"
6'-8"
2-10"CI 20" 1/8" b to b
2-10"CI 20" 1/8" b to b
2-1 1/2" Steel Rods
2-1 1/2" Steel Rods
2-1 1/2" Steel Rods
3'-4"
3'-4"
3'-4"



SECTION a-a

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 120

SCALE: 0 1 2 3 FEET

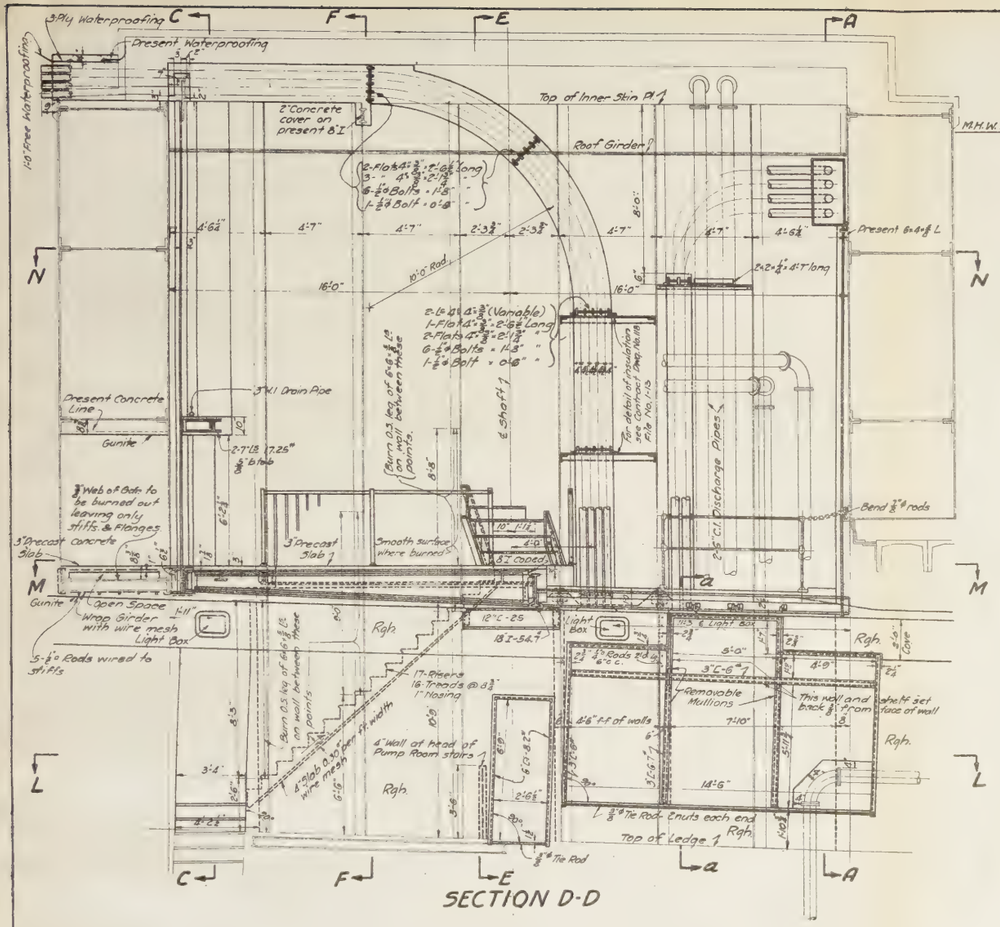
DATE AUG. 4, 1925

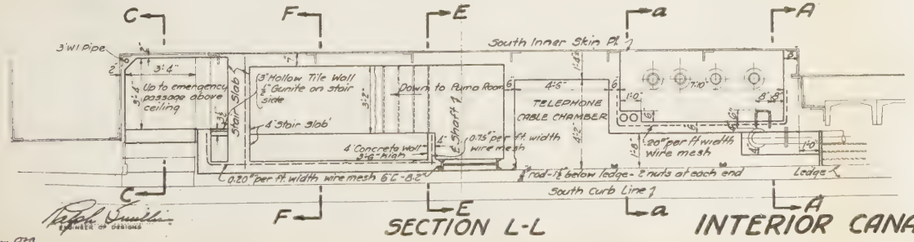
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

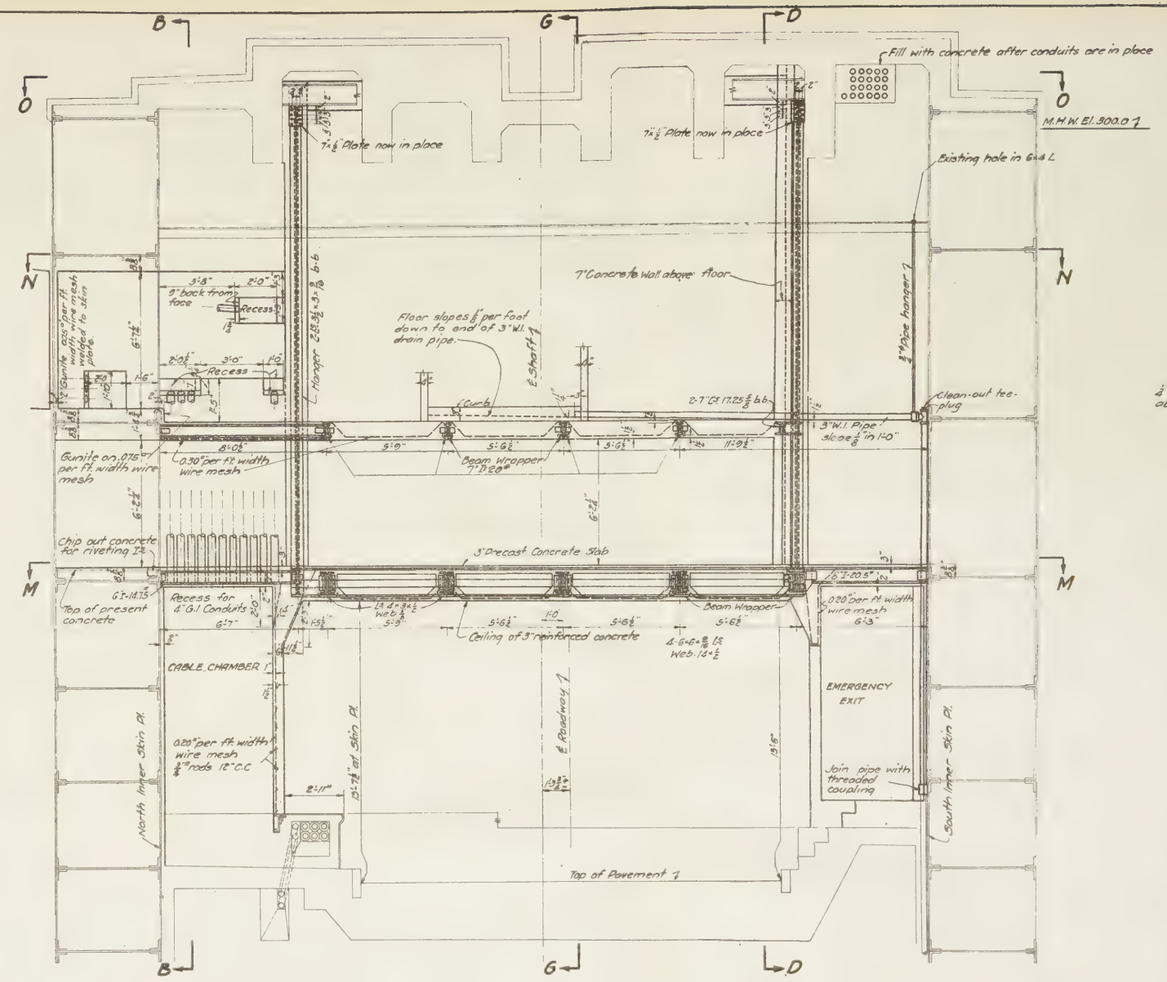
DRAWN BY
CHECKED

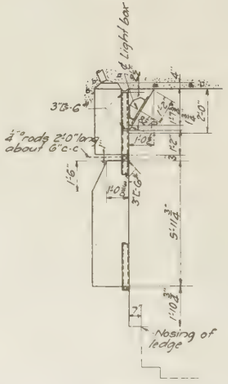
M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


3 Ply Waterproofing
Present Waterproofing
2" Concrete cover on present 8" I
Top of Inner Skin Pl.
Roof Girder
M.H.W. El. 300.01
Present 6"x4"x⅞" L
10'-0" Rod
16'-0"
3" W.I. Drain Pipe
Present Concrete Line
Gunite
2-7"@ 17.25 lbs/ft
E. Shaft
Burn 0.3 leg of 6"x4"x⅞" L on wall between holes (typ.)
For detail of insulation see Contract Dwg. No. 118 File No. 1-13
24" C.I. Discharge Pipes
⅞" Web of Bds. to be burned out leaving only stiffs. & Flanges
3" Precast Slab
Smooth surface where burned
10" I 17.5
6" Coping
3" Precast Concrete Slab
Open Space
Wrap Spiralor with wire mesh
Light Box
5-¾" Rods wired to Stiffs.
Bend ⅞" rods
Rgh.
12'-2.5"
18'-5⅛"
17-Risers @ 8⅜"
16-Treads @ 8⅜"
1" Nosing
Burn 0.3 leg of 6"x4"x⅞" L on wall between points
4" Slab 0.30" per ft. width
4" Wall at head of Pump Room stairs
3'-4"
3'-6" c.f. of walls
Removable Mullions
This new end shall set back ⅜" from face of wall
14'-6"
⅞" ø Tie Rod - Enuts each end
Top of Ledge
⅞" ø Tie Rod
Cove
SECTION D-D


3" W.I. Pipe
Up to emergency passage above ceiling
3" Hollow Tile Wall & Gunite on stair side
Stair Slab
4'-3" Stair Slab
4" Concrete Wall 2'-6" High
E. Shaft
Down to Pump Room
4'-5"
TELEPHONE CABLE CHAMBER
0.75" per ft. width wire mesh
20" per ft width wire mesh
0.20" per ft. width wire mesh 6'-6"-8'-0"
⅞" rod - 1⅛" below ledge - 2 nuts at each end
South Curb Line
Ledge
South Inner Skin Pl.
SECTION L-L

INTERIOR CANAL ST. SHAFT


Fill with concrete after conduits are in place
7½" Plate now in place
Existing hole in 6"x4" L
M.H.W. El. 300.01
7" Concrete Wall above floor
3" Pipe hanger
Floor slopes ⅛" per foot down to end of 3" W.I. drain pipe.
E. Shaft
Recess
Curb
2-7" @ 17.25 lbs/ft
Clean-out tee-plug
3" W.I. Pipe sloped ⅛" in 1'-0"
Gunite on 0.75" per ft. width wire mesh
0.30" per ft width wire mesh
Beam Wrapper 1'-8.0"
Chip out concrete for riveting
3" Precast Concrete Slab
Recess for 4" G.I. Conduits
Top of present concrete
Ceiling of 3" reinforced concrete
4-6"x6"x⅞" Ls Web 14½"
0.20" per ft width wire mesh
CABLE CHAMBER
E. Roadway
0.20" per ft width wire mesh ⅝" rods 12" c.c.
North Inner Skin Pl.
South Inner Skin Pl.
EMERGENCY EXIT
Join pipe with threaded coupling
Top of Pavement
SECTION C-C



REFERENCE NOTES

For Sections A-A & B-B	see Contract Dwg. No. 119,	File No. 1-13
" " E-E & F-F	" " "	" 122, " "	1-13
" " G-G & O-O	" " "	" 123 " "	1-13
" " M-M & N-N	" " "	" 121 " "	1-13
" Typical Section G-G	" " "	" 118 " "	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 15
CONTRACT DRAWING No. 120

SCALE: 0 1 2 3 FEET

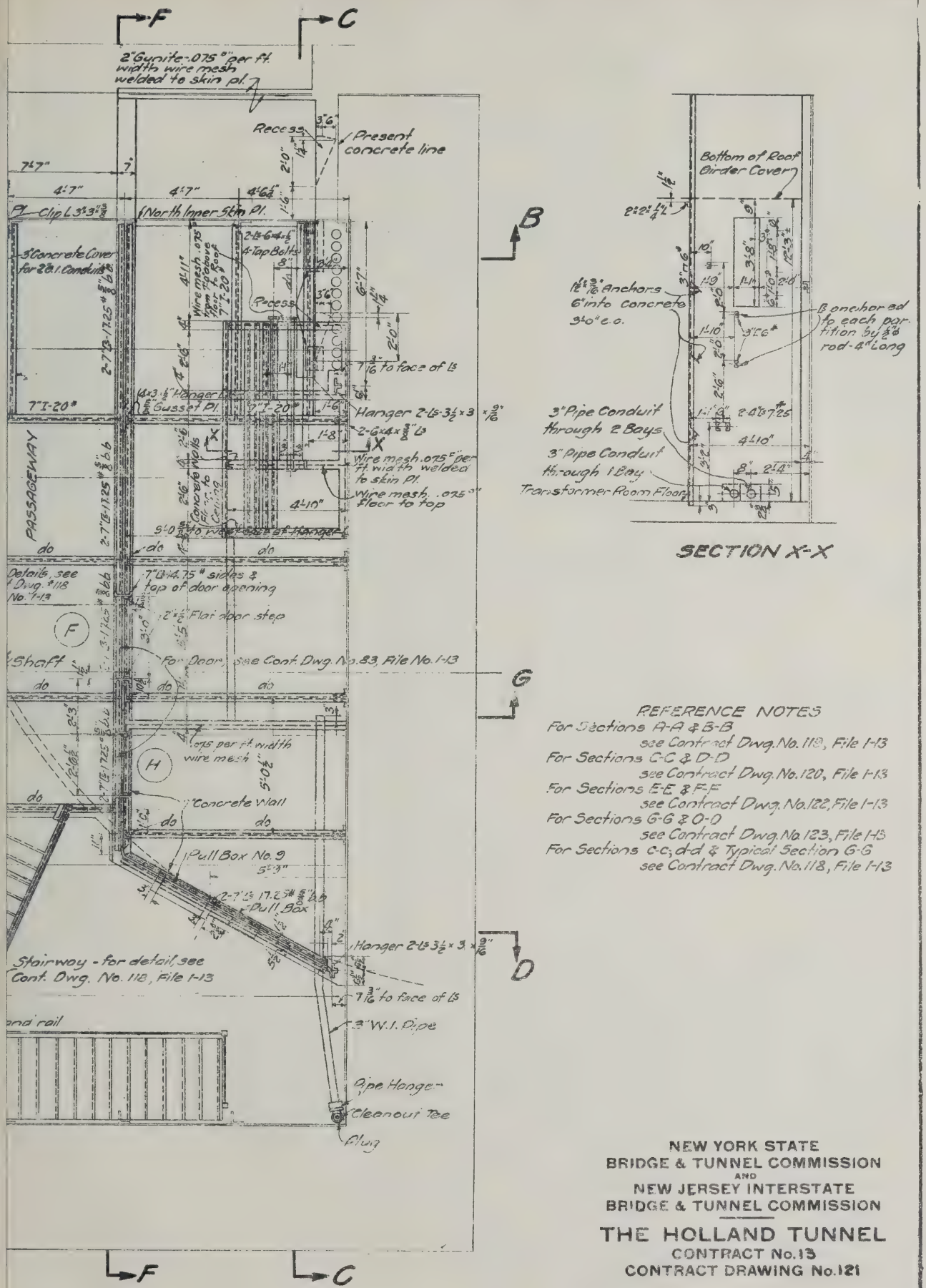
DATE AUG. 4, 1928

CHIEF ENGINEER

FILE NO. 1-13

DRAWN BY: OTA
CHECKED BY: S.H.K. P.P.K.

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


F
C
2" Gunite - .075 " per ft. width wire mesh welded to skin pl.
Present concrete line
Recess
North Inner Skin Pl.
Clip L
3" Concrete Cover for 2 8 I. Conduits
2-L 6-4 x 4
4-Tap Bolts
Wire mesh .075 " per ft. width welded to skin pl.
Recess
7 1/16 to face of L
Hanger
Gusset Pl.
Hanger 2-L 3 1/2 x 3 x 9/16
2-C 6 x 4 x 3/8
Wire mesh .075 " per ft. width welded to skin pl.
Wire mesh .075 " Floor to top
Concrete Walls
Face of Hanger
PASSAGEWAY
do
Details, see Dwg. # 118 No. 1-13
7'0 x 4.75 " sides & top of door opening
2'6 1/2 Flat door step
F
Shaft
For Door, see Cont. Dwg. No. 83, File No. 1-13
G
.075 per ft. width wire mesh
H
Concrete Wall
Pull Box No. 9
Pull Box
Hanger 2-L 3 1/2 x 3 x 9/16
D
Stairway - for detail see Cont. Dwg. No. 118, File 1-13
7 1/16 to face of L
3" W. I. Pipe
Pipe Hanger
Cleanout Tee
Plug
and rail
F
C
CTION N-N
B
X
X
Bottom of Roof Girder Cover
1 1/2 Anchors 6" into concrete 3'0" c.c.
B anchor bd to each partition by 5/8 rod - 4" Long
3" Pipe Conduit through 2 Bays
3" Pipe Conduit through 1 Bay
Transformer Room Floor
SECTION X-X

REFERENCE NOTES

For Sections A-A & B-B
see Contract Dwg. No. 118, File 1-13
For Sections C-C & D-D
see Contract Dwg. No. 120, File 1-13
For Sections E-E & F-F
see Contract Dwg. No. 122, File 1-13
For Sections G-G & O-O
see Contract Dwg. No. 123, File 1-13
For Sections c-c; d-d & Typical Section G-G
see Contract Dwg. No. 118, File 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 121

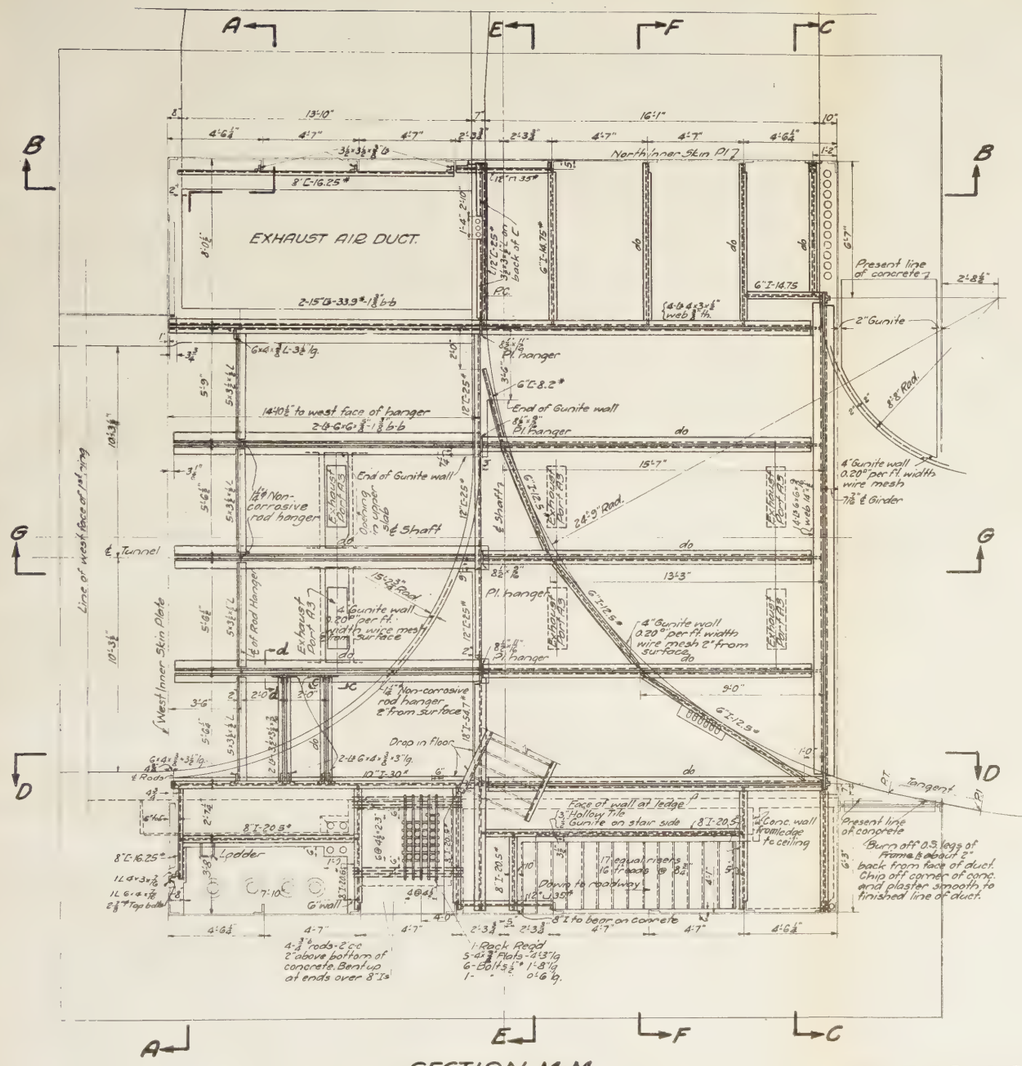
SCALE: 0 1 2 3

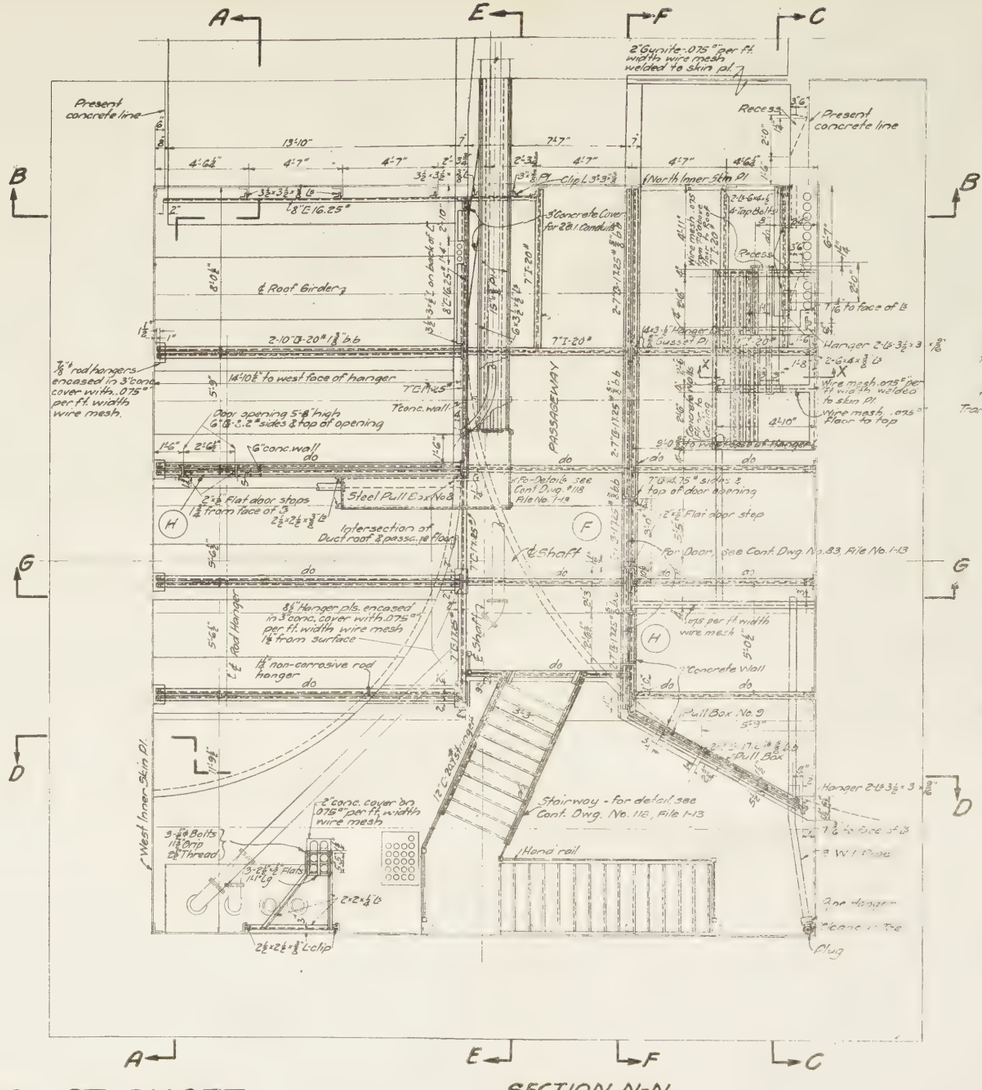
DATE: AUG. 4, 1925

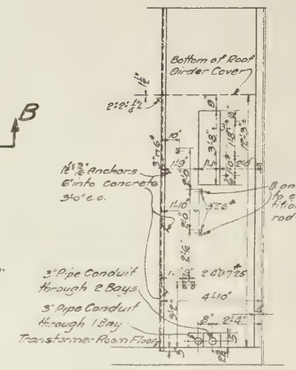
CHIEF ENGINEER

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.




Present concrete line
2" Gunite .075" per ft. width wire mesh welded to skin pl.
North Inner Skin Pl.
Roof Girder
PASSAGEWAY
Concrete wall
Steel Pull Box No.8
Intersection of Duct roof & passage floor
Shaft
Steel Pull Box No.9
Stairway - for detail see Cont. Dwg. No. 118, File 1-13
Hand rail
West Inner Skin Pl.
SECTION N-N



REFERENCE NOTES
For Sections A-A & B-B see Contract Dwg. No. 119, File 1-13
For Sections C-C & D-D see Contract Dwg. No. 120, File 1-13
For Sections E-E & F-F see Contract Dwg. No. 122, File 1-13
For Sections G-G & O-O see Contract Dwg. No. 123, File 1-13
For Sections a-a, d-d & Typical Section G-G see Contract Dwg. No. 118, File 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 121

INTERIOR CANAL ST. SHAFT

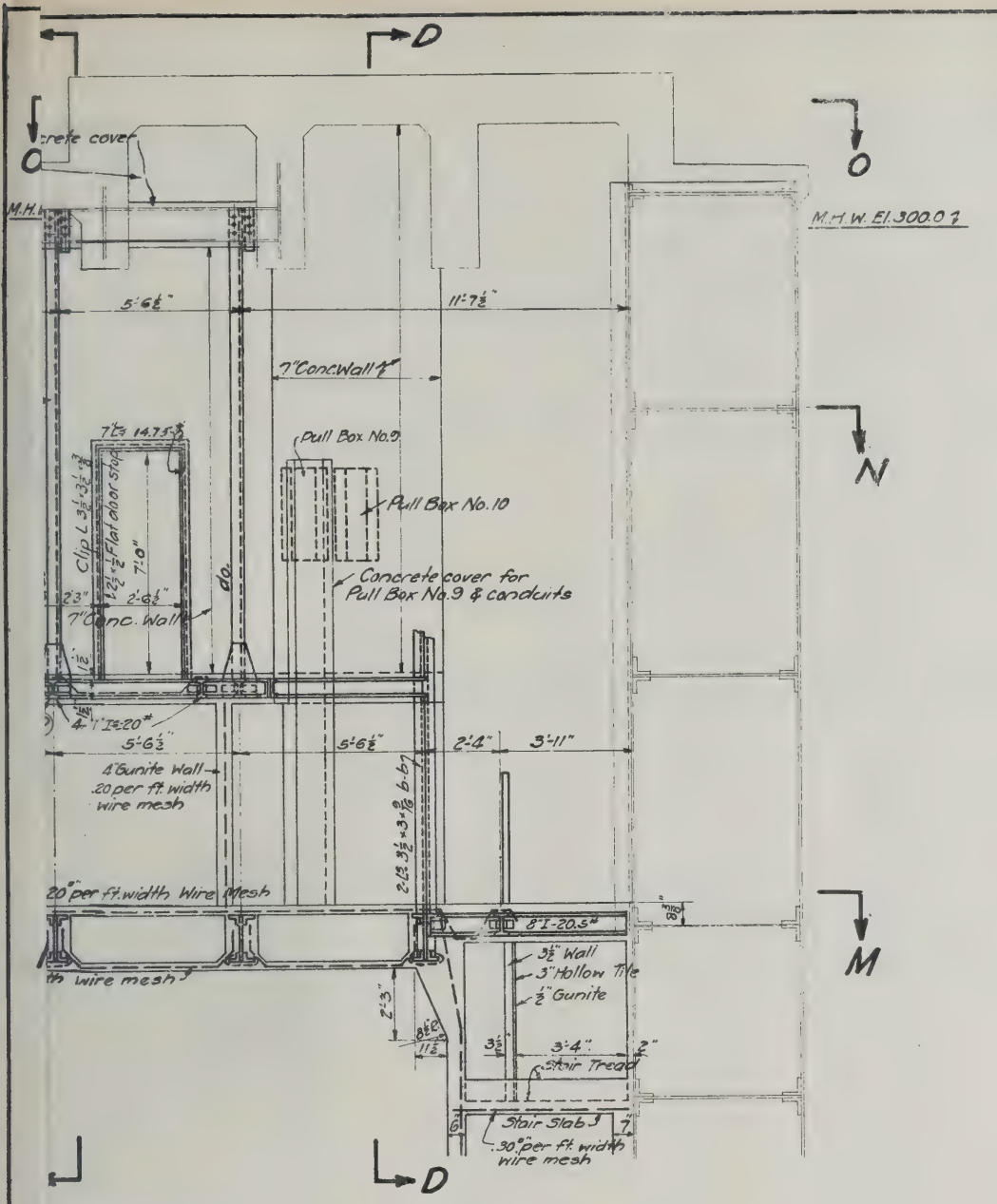
DRAWN BY GTB
CHECKED BY JMK 9.P.K.

ENGINEER OF DESIGNS

CHIEF ENGINEER

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



NOTES.

of Dwg. No. 119, File No. 1-13
" " 120, " " 1-13
" " 121 " " 1-13
" " 123 " " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 122

SCALE: 0 1 2 3 FEET

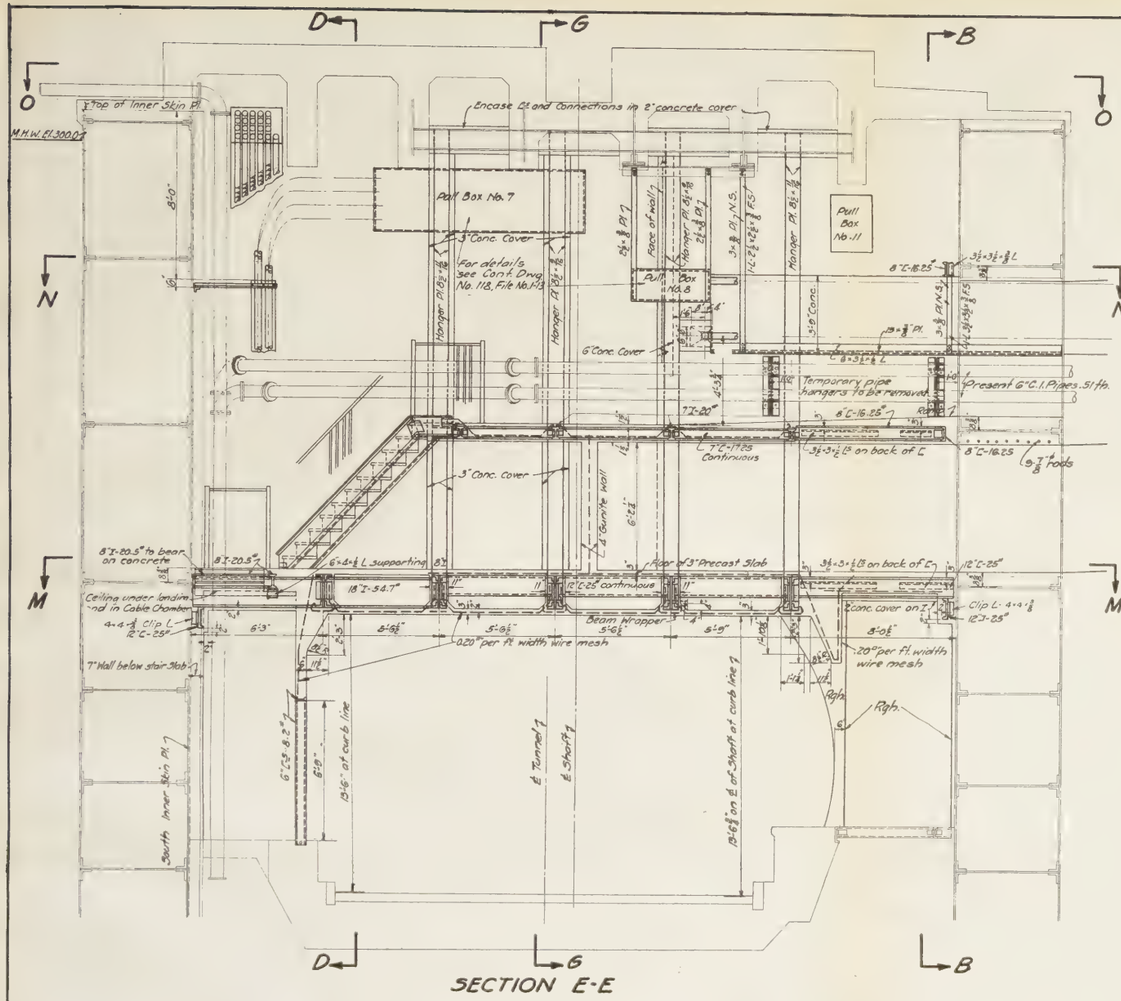
DATE: AUG. 4, 1925

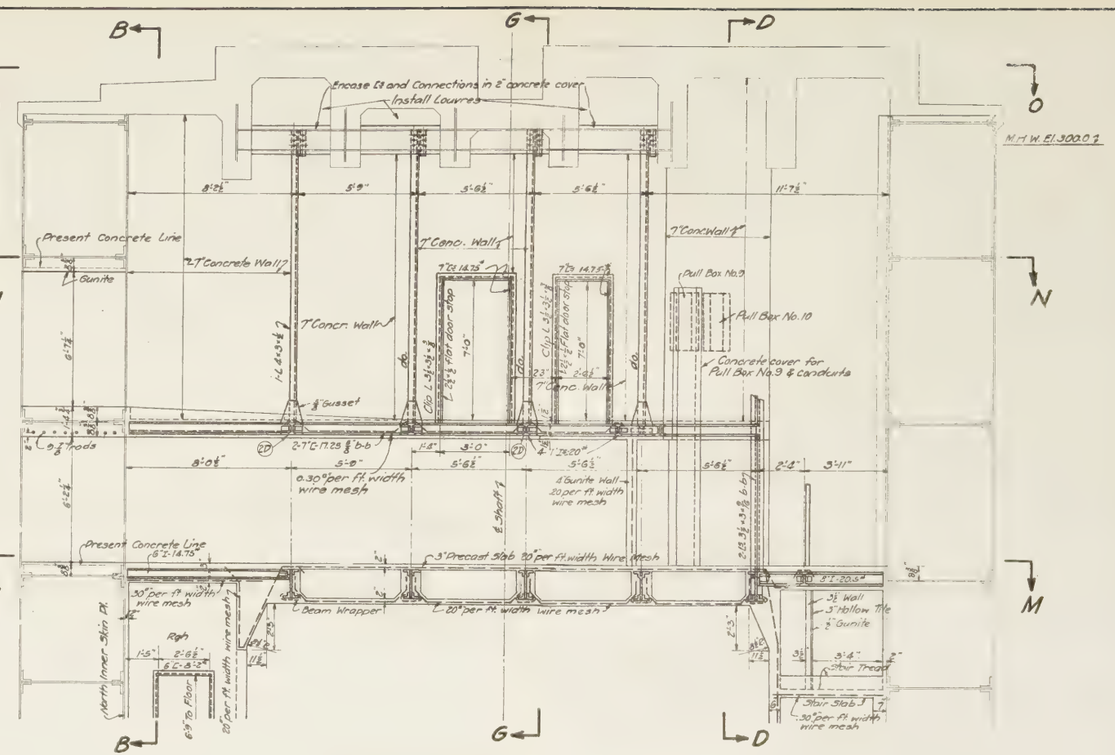
Ole Singstad
CHIEF ENGINEER

DRAWN
CHECKED

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


Top of Inner Skin Pl.
M.H.W. El. 300.0 ?
Encase Cs and Connections in 2" concrete cover
Pull Box No. 7
Pull Box No. 11
Pull Box No. 8
3" Conc. Cover
For details see Cont. Dwg. No. 118, File No. 1-13
6" Conc. Cover
Temporary pipe hangers to be removed
Present 6" C.I. Pipes, 51 ft.
7"C-17.25 Continuous
3" Conc. cover
4" Gunite Wall
Floor of 3" Precast Slab
Ceiling under landing and in Cable Chamber
Beam Wrapper
20" per ft. width Wire mesh
T Wall below stair Slab
E Tunnel ℄
E Shaft ℄
South Inner Skin Pl.
SECTION E-E



REFERENCE NOTES.

For Section B-B	see Contract Dwg. No. 119, File No. 1-13				
" " D-D	"	"	"	120,	" " 1-13
" Sections M-M & N-N	"	"	"	121	" " 1-13
" " O-O & G-G	"	"	"	123	" " 1-13

INTERIOR CANAL ST. SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 122

SCALE: FEET DATE AUG 4 1925

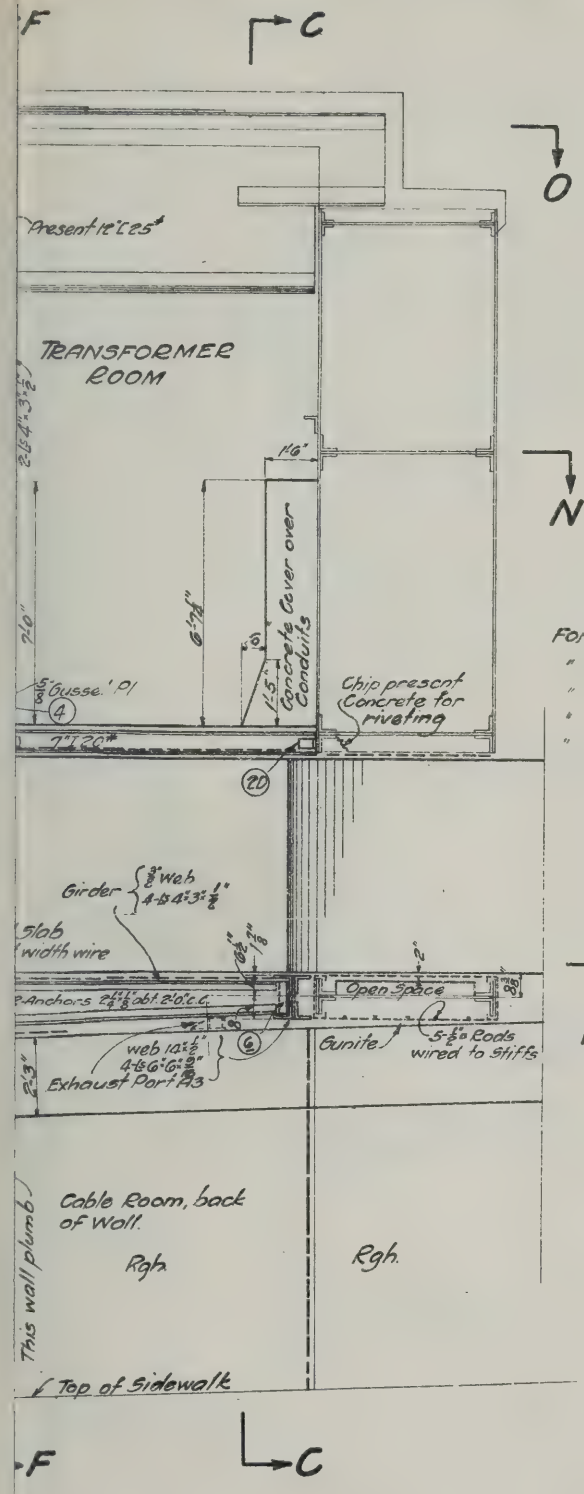
CHIEF ENGINEER

FILE No. 1-13

DRAWN BY. OTTO
CHECKED BY. J.H.H. P.P.K.

ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.
37-41 Chambers Street, N. Y.



REFERENCE NOTES.

For Sections A-A & B-B, see Contract Dwg. No. 119, File 1-13
" " C-C & D-D, " " " " 120, " 1-13
" " M-N & N-N, " " " " 121, " 1-13
" " E-E & F-F, " " " " 122, " 1-13
" Typical Section G-G, " " " " 118, " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 123

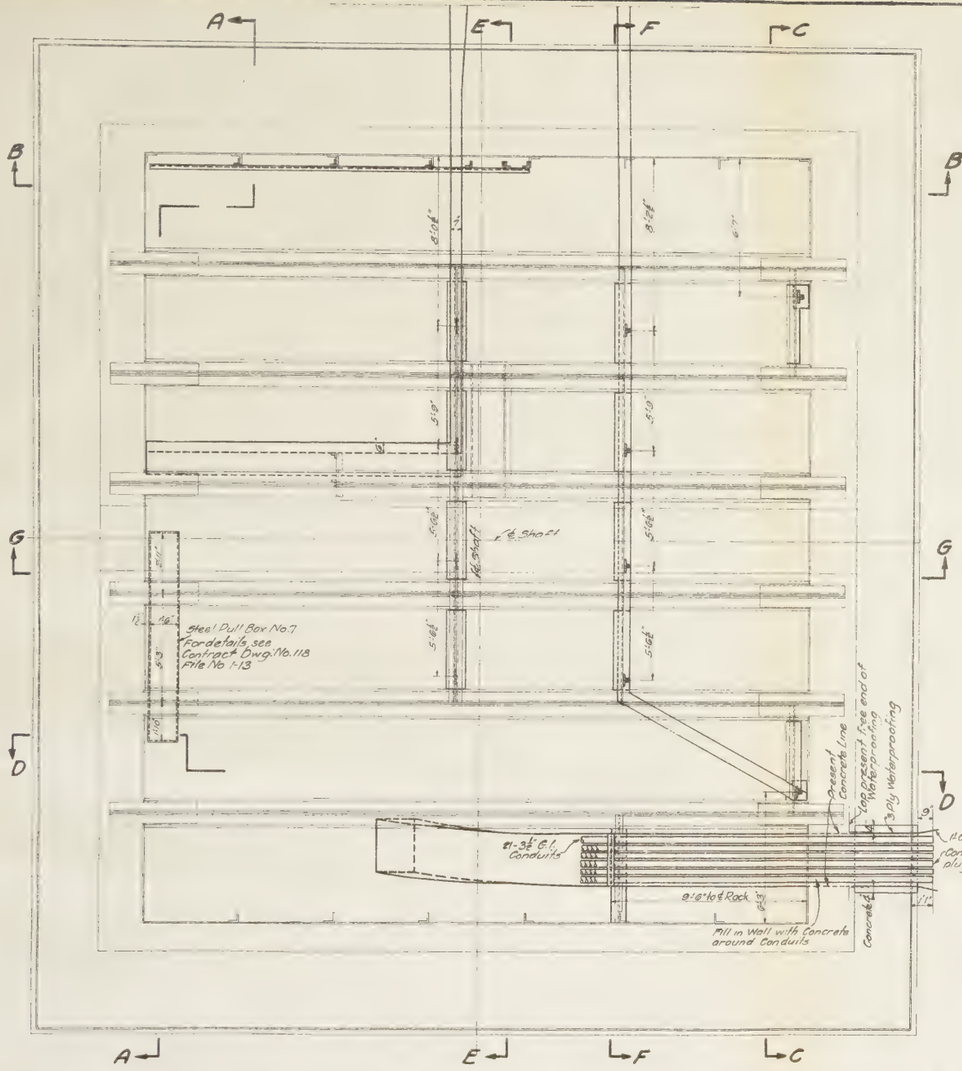
SCALE: 0 1 2 3 FEET

DATE AUG. 4, 1925

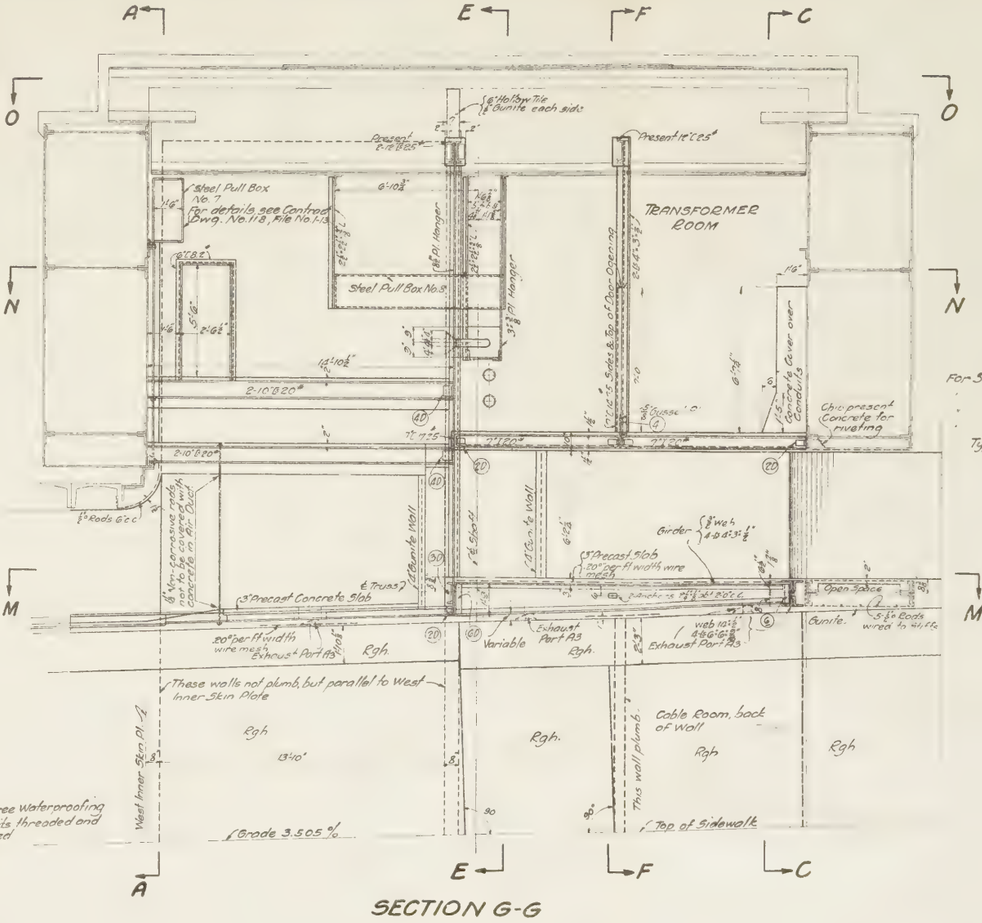
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co
37-41 Chambers Street, N. Y.



SECTION O-O



SECTION G-G

REFERENCE NOTES

For Sections A-A & B-B, see Contract Dwg. No. 119, File 1-13
" C-C & D-D, " " " 120, " 1-13
" M-N & N-N, " " " 121, " 1-13
" E-E & F-F, " " " 122, " 1-13
Typical Section G-G, " " " 118, " 1-13

INTERIOR CANAL ST. SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No.13
CONTRACT DRAWING No.123

SCALE: 0 1 2 3 FEET

DATE AUG. 4, 1925

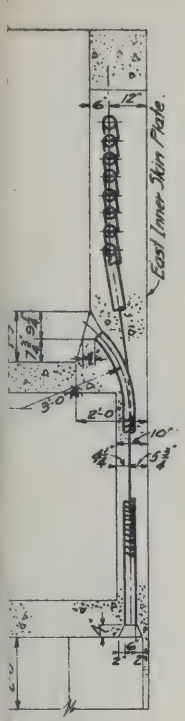
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

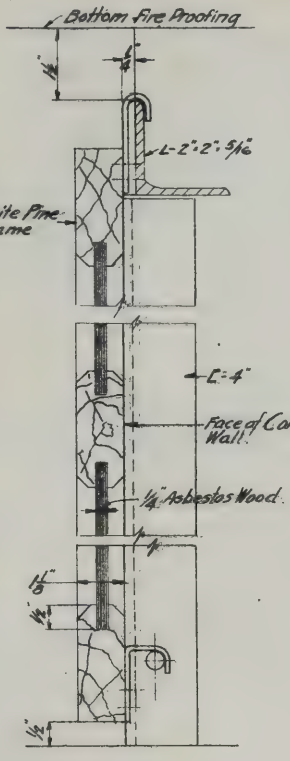
DRAWN BY OTB
CHECKED BY JPK SPK

Richard Smillie
ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.

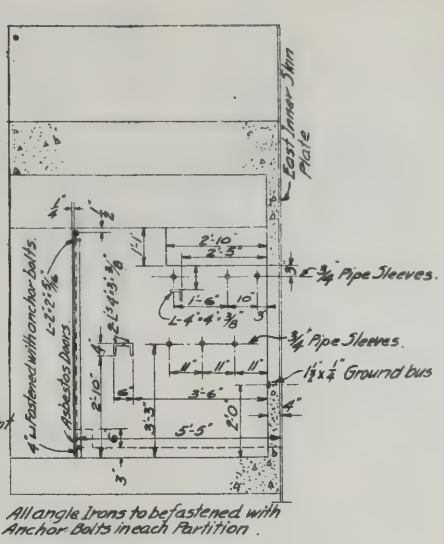


ECTION y-y



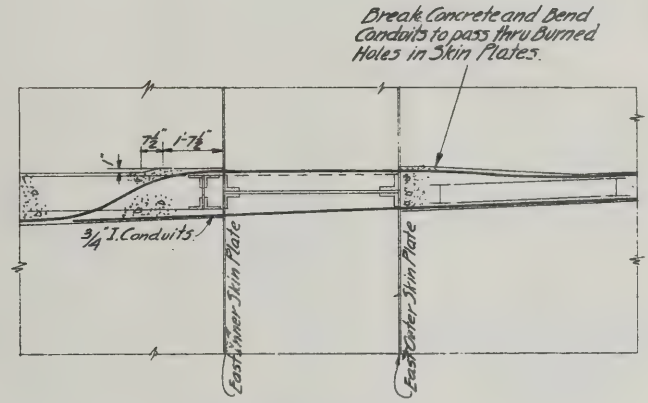
DETAIL P

0 1 2 3 4 INCHES



All angle Irons to be fastened with Anchor Bolts in each Partition.

SECTION f-f


Break Concrete and Bend Conduits to pass thru Burned Holes in Skin Plates.
7½"
1'-7½"
3/4" I. Conduits.
East Inner Skin Plate
East Center Skin Plate

SECTION g-g

9

REFERENCE DWG

	see Contract Dwg. #113 to 118 incl.	File #1-13
Pull Boxes	#58	#1-13
"	#59	#1-13
Box	#126	#1-13
"	#126	#1-13

et box in ceiling
et box in wall

L. B. Hallwell
CONSULTING ENGINEER

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 124

SCALE: 0 1 2 3 FEET EXCEPT AS SHOWN

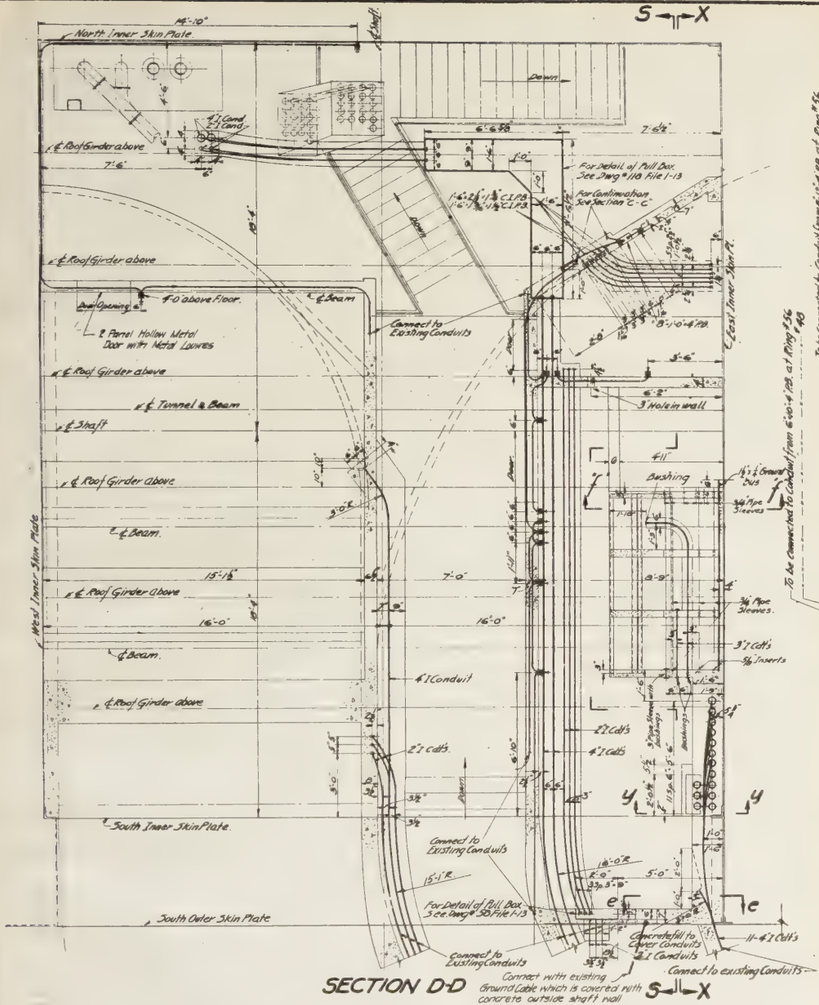
DATE AUG 4 1925

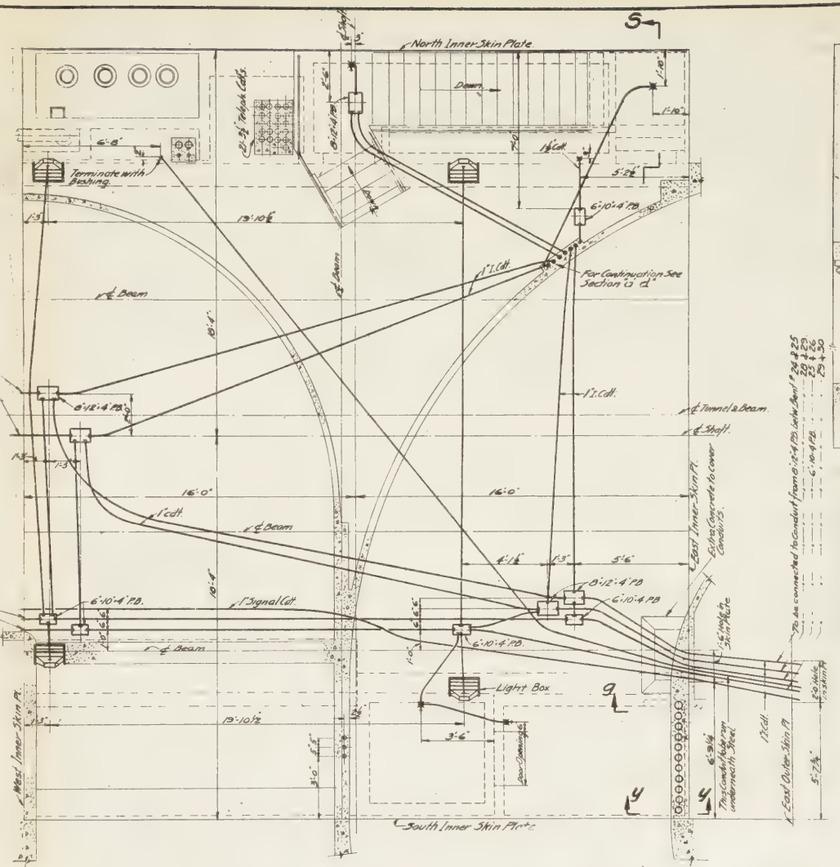
Ole Singstad
CHIEF ENGINEER

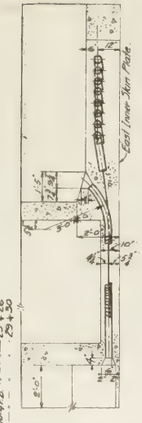
DRAWN
CHECKED

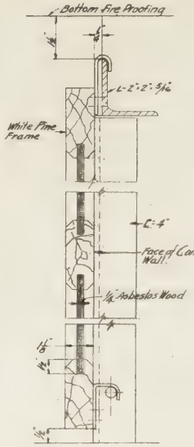
FILE NO 1-13

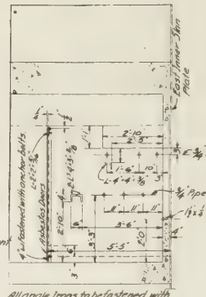
M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N Y

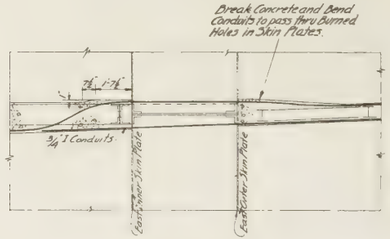

North Inner Skin Plate
Down
℄ Roof Girder above
℄ Beam
Door Opening
Connect to Existing Conduits
℄ Tunnel & Beam
℄ Shaft
West Inner Skin Plate
South Inner Skin Plate
South Outer Skin Plate
East Inner Skin Pl.
For Detail of Pull Box See Dwg # 118 File 1-13
For Continuation See Section C-C
3' Hole in wall
Bushing
Connect to existing Conduits
Connect with existing Ground Cable which is covered with concrete outside shaft wall
Concrete fill to Cover Conduits
Connect to existing Conduits
SECTION D-D








East Inner Skin Plate
3/4" Pipe Sleeves
Ground bus
All angle irons to be fastened with Anchor Bolts in each Partition.
SECTION f-f


Break Concrete and Bend Conduits to pass thru Burned Holes in Skin Plates.
3" Conduits
East Inner Skin Plate
East Outer Skin Plate
SECTION g-g

Notes
All conduits 3/4" iron unless otherwise noted.
All 3/4" conduits terminating in boxes to be closed with capped bushings; all larger conduits terminating in boxes to be closed with "pennies" under the bushings

REFERENCE DWG

For Interior Spring St Shaft	See Contract Dwg # 113 to 118 incl File # 1-13
For Typical Detail of Sheet Iron Pull Boxes	" # 58 " " # 1-13
For Details of Cast Iron Boxes	" # 59 " " # 1-13
For Details of Cast Iron Light Box	" # 126 " " # 1-13
For Sections S-S & XXXXe	" # 126 " " # 1-13

LEGEND
- 3 1/2 x 3 1/2 x 2" Cast iron outlet box in ceiling
- 3 1/2 x 3 1/2 x 2" Cast iron outlet box in wall
- Conduit going up
- Conduit going down
- Ground Cable

ELECTRICAL CONDUIT SYSTEM INTERIOR SPRING ST. SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 124

SCALE: EXCEPT AS SHOWN — FEET — DATE: AUG 4 1925

L. B. Stillwell
CONSULTING ENGINEER

Ole Singstad
CHIEF ENGINEER

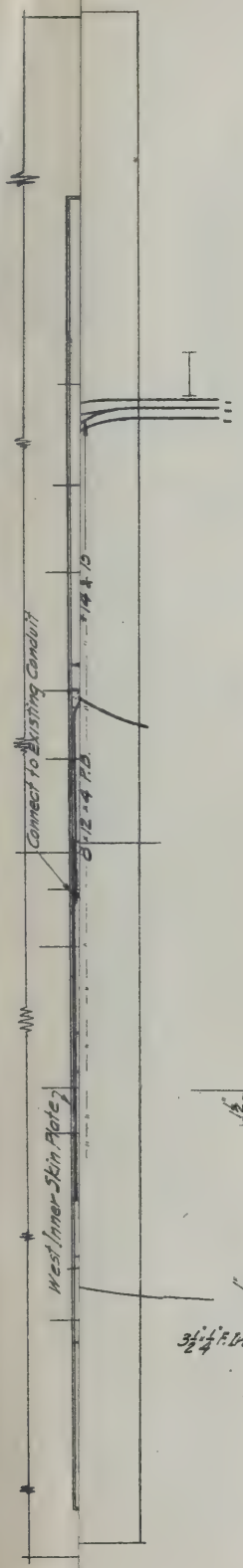
J. A. Dodd
ELECTRICAL ENGINEER

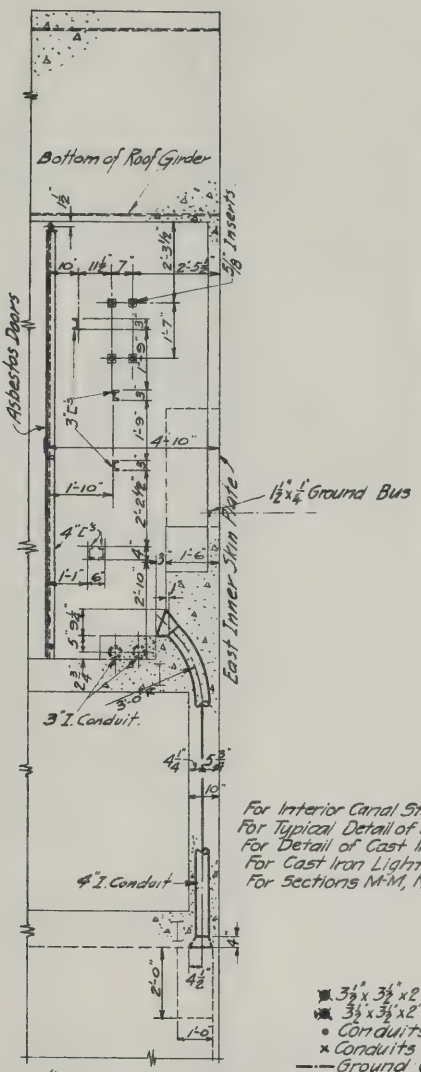
Rafael Guastavino
PRINCIPAL OF DESIGNS

DRAWN BY FT.
CHECKED BY L.S.

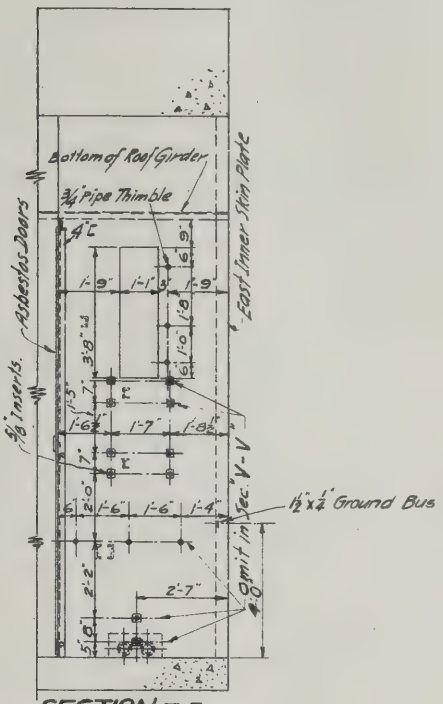
FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

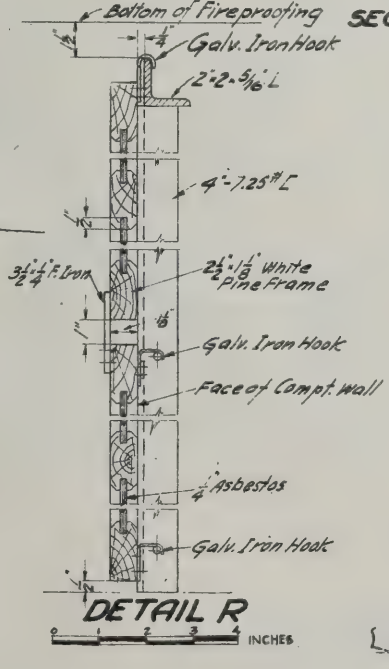




SECTION 3-3
SECTION V-V



SECTION U-U



DETAIL R

0 1 2 3 4 INCHES

REFERENCE DWGS.

For Interior Canal St. Shaft	see Contract Dwg	#1191 to #123,	File #1-13
For Typical Detail of Sheets Iron Pull Boxes	"	#58	" #1-13
For Detail of Cast Iron Pull Boxes	"	#59	" #1-13
For Cast Iron Light Boxes	"	#126	" #1-13
For Sections M-M, N-N, etc	"	#126	" #1-13

LEGEND

- 3½" x 3½" x 2" Cast iron outlet box in ceiling
- 3½" x 3½" x 2" Cast iron outlet box in wall.
- • Conduits going up
- × Conduits going down
- —·— Ground Cable

L. B. Stillwell
CONSULTING ENGINEER

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 125

SCALE: 0 1 2 3 FEET

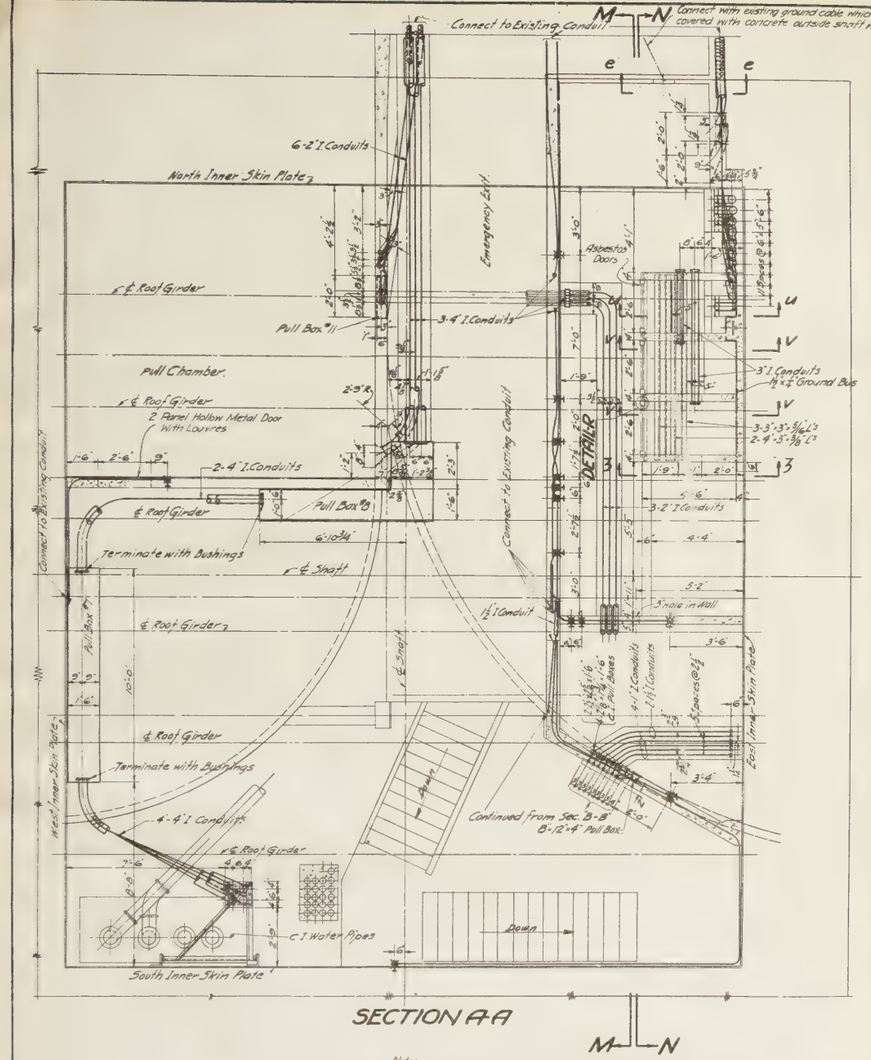
DATE AUG 4, 1925

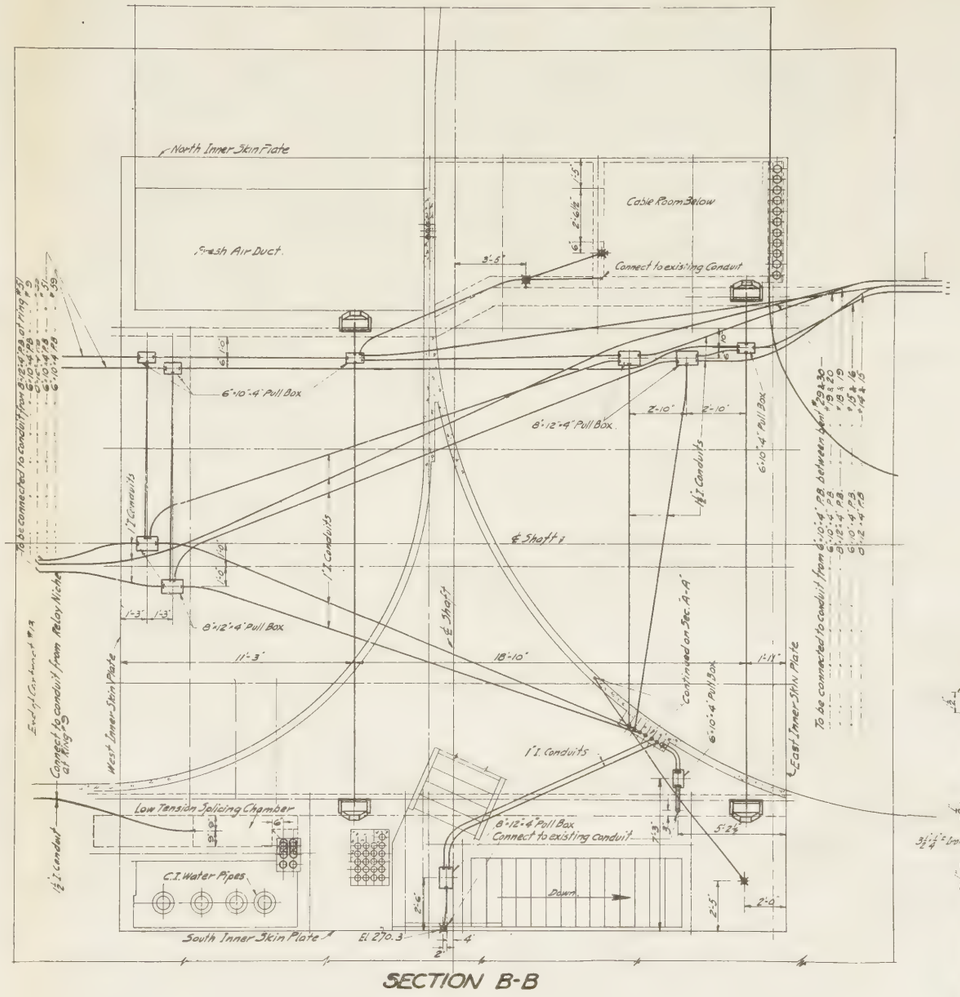
Ole Singstad
CHIEF ENGINEER

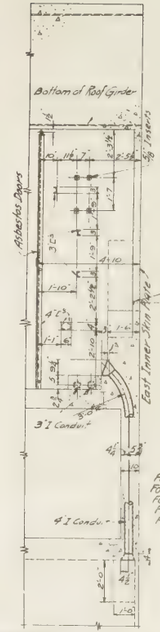
DRAWN BY
CHECKED BY

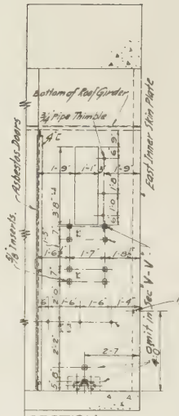
FILE NO. 1-13

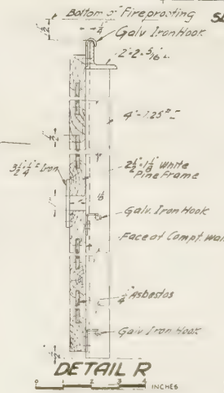
M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.











REFERENCE DWGS

For Interior Canal St. Shaft	See Contract Dwg #119 to #123	File #1-13
For Typical Detail of Steers Iron Pull Boxes	#30	#1-13
For Detail of Cast Iron Pull Boxes	#59	#1-13
For Cast Iron Light Boxes	#126	#1-13
For Sections M-M, N-N	#126	#1-13

LEGEND

- ■ 3½" x 3½" x 2" Cast iron outlet box in ceiling
- ■ 3½" x 3½" x 2" Cast iron outlet box in wall
- + Conduits going up
- × Conduits going down
- —— Ground Cable

Notes
All conduits ¾" iron unless otherwise noted.
All ¾" conduits terminating in boxes to be closed with capped bushings; all larger conduits terminating in boxes to be closed with "pennies" under the bushings

ELECTRICAL CONDUIT SYSTEM
INTERIOR CANAL STREET SHAFT

L. B. Stillwell
CONSULTING ENGINEER

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 125

SCALE: FEET
DATE AUG 4, 1925

Ole Singstad
CHIEF ENGINEER

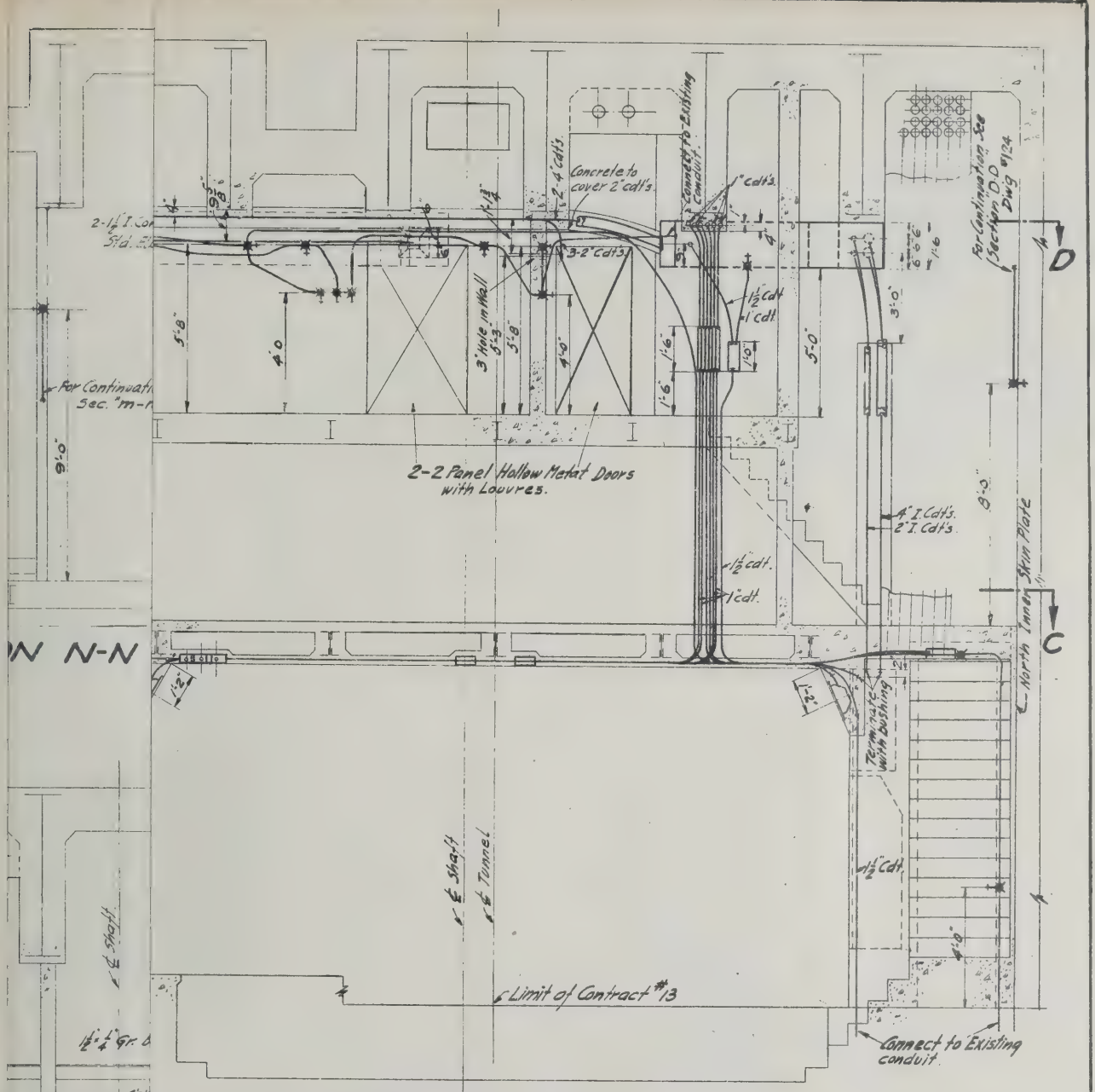
FILE NO 1-13

DRAWN BY A.B.W.
CHECKED BY L.L.T.

A. H. Rudd
ELECTRICAL ENGINEER

Ralph Smith
ENGINEER OF DESIGN

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 126

L. B. Wallace
CONSULTING ENGINEER

SCALE: 0 1 2 3 4 FEET EXCEPT AS SHOWN

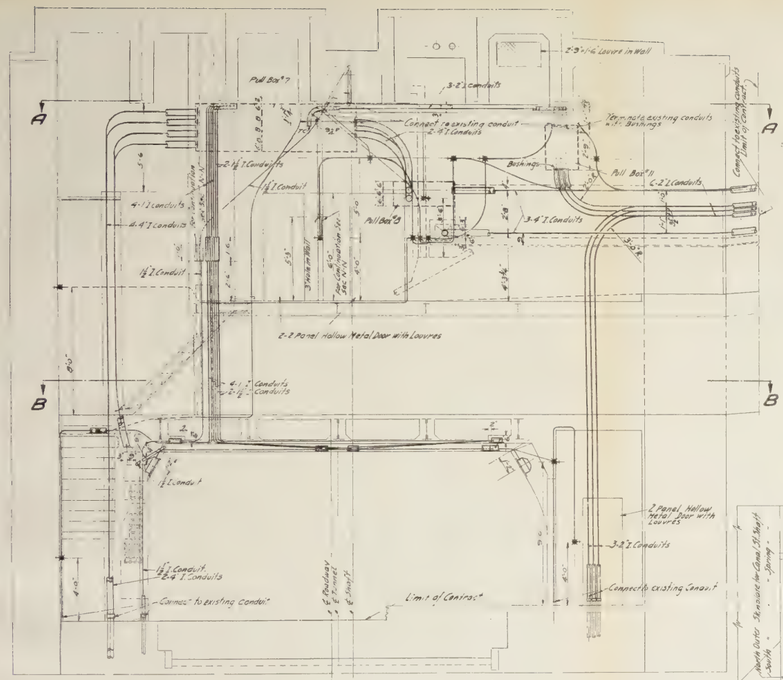
DATE AUG 4 1925

Ole Singstad
CHIEF ENGINEER

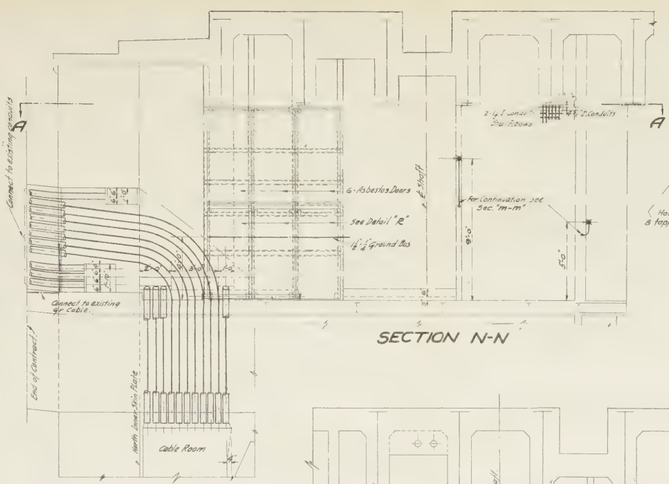
FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

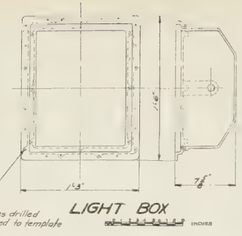
37-41 Chambers Street, N. Y.



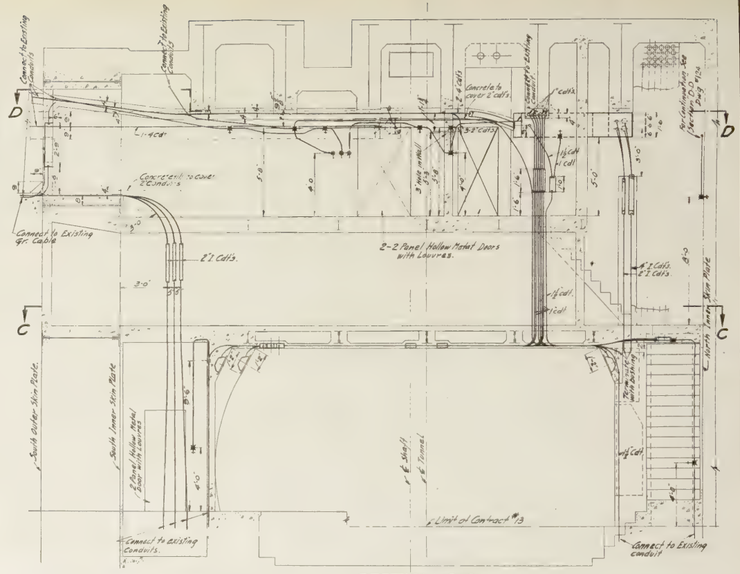
SECTION M-M



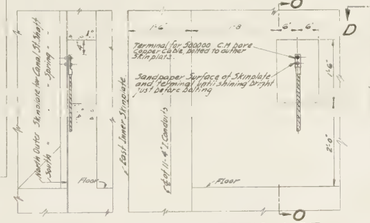
SECTION N-N



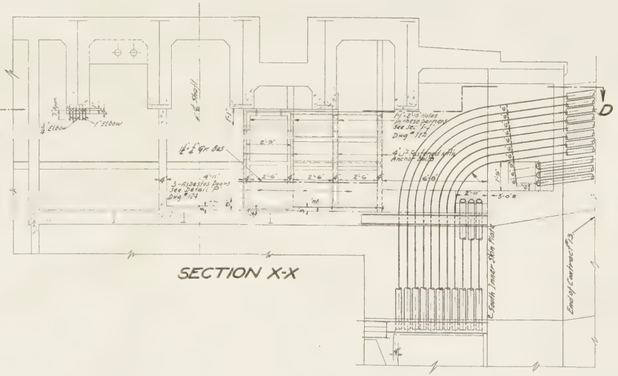
LIGHT BOX


Concrete to cover 2 Conduits
Concrete to cover 2 Conduits
2-2 Panel Hollow Metal Doors with Louvres.
Connect to Existing gr. Cable
Connect to existing Conduits.
South Outer Skin Plate
South Inner Skin Plate
E. Shaft
E. Tunnel
Limit of Contract #13
Connect to Existing conduit

SECTION S-S


Terminal for 350000 C.M bare Copper Cable Bolted to outer Skin plate.
Sandpaper Surface of Skinplate and Terminal with Shining Brightness before Bolting
Floor
E. Shaft
E. Tunnel
North Outer Skin Plate
Spring
Floor

SECTION O-O SECTION E-E



SECTION X-X

REFERENCE DWGS

For Electrical Conduit System Sections CC & DD Spring St. Singer, see Contract Dwg. # 124 & 113.
For Electrical Conduit System Sections AA & BB Canal St. Singer, see Contract Dwg. # 125 & 113.
For Typical Details Sheet Iron Pull Boxes, see Contract Dwg. # 129 & 113.
For Details, Cast Iron Pull Boxes, see Contract Dwg. # 139 & 113.

LEGEND
- Conduits in walls or floors
- Grounding Cable
- 24"x24"x12" Cast iron outlet box in ceiling
- 24"x24"x12" Cast iron outlet box in wall

Notes
All conduits 3/4" iron unless otherwise noted.
All 2" conduits terminating in boxes to be coped with capped bushings; all longer conduits terminating in boxes to be fluted with "pennies" under the bushings.
All ground connections to be spiced and soldered. Where ground cables are connected to steel the surface thereof should be sandpapered until shining brightly just before connection is made.
Conduits terminating above or below floor slab to be threaded and capped from 3" to 4'-0" above or below floor slab unless otherwise noted.

SCALE 0 1 2 3 FEET — EXCEPT AS SHOWN

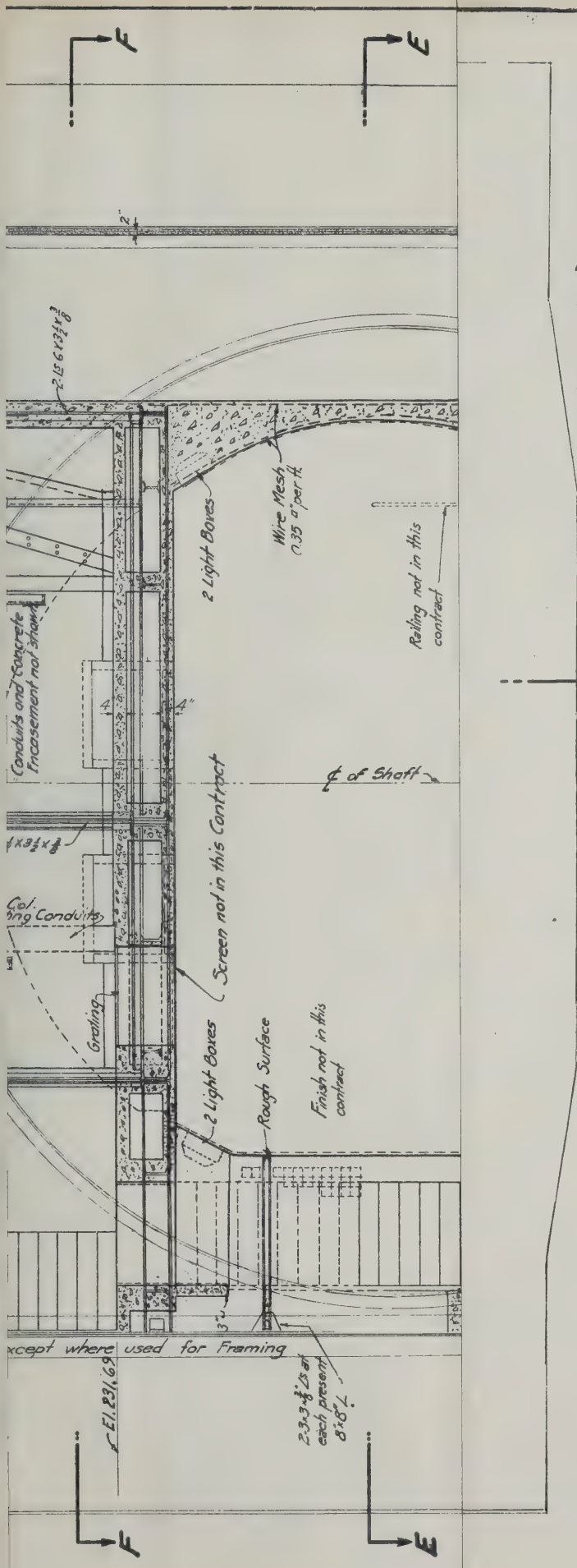
ELECTRICAL CONDUIT SYSTEM
INTERIOR, SPRING and CANAL STREET SHAFTS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 126

DRAWN BY E.B.M. — E.B. Melville, CONSULTING ENGINEER
CHECKED R.S. — Ralph Smith, CHIEF OF DESIGNS
E.B. Melville, ELECTRICAL ENGINEER
Ole Singstad, CHIEF ENGINEER
DATE AUG. 6, 1925
FILE NO. 113

M. B. Brown Printing & Binding Co., 37-41 Chambers Street, N. Y.



C

SECTION A-A
SOUTH SHAFT

For Key Plan see Contract Dwg. No. 131, File No. 1-13
" Sections C-C " " " 129 " " 1-13
" " E-E " " " 131 " " 1-13
" " F-F " " " 132 " " 1-13
" " G-G " " " 133 " " 1-13
" " H-H " " " 134 " " 1-13
" " I-I " " " 135 " " 1-13
" " J-J " " " 136 " " 1-13
" " K-K " " " 137 " " 1-13

For Architectual Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 60 to 84 incl. File No. 1-13
For Steel Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 85 to 99 incl. File No. 1-13
For Electrical Conduit Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 100 to 109 incl. File No. 1-13
For Structural Drawings of Interior River Shafts, N.Y. see Contract Dwgs. Nos. 129 to 137 incl. File No. 1-13
For Electrical Conduit Drawings of Interior River Shafts, N.Y. see Contract Dwgs. Nos. 138 & 139, File No. 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 127

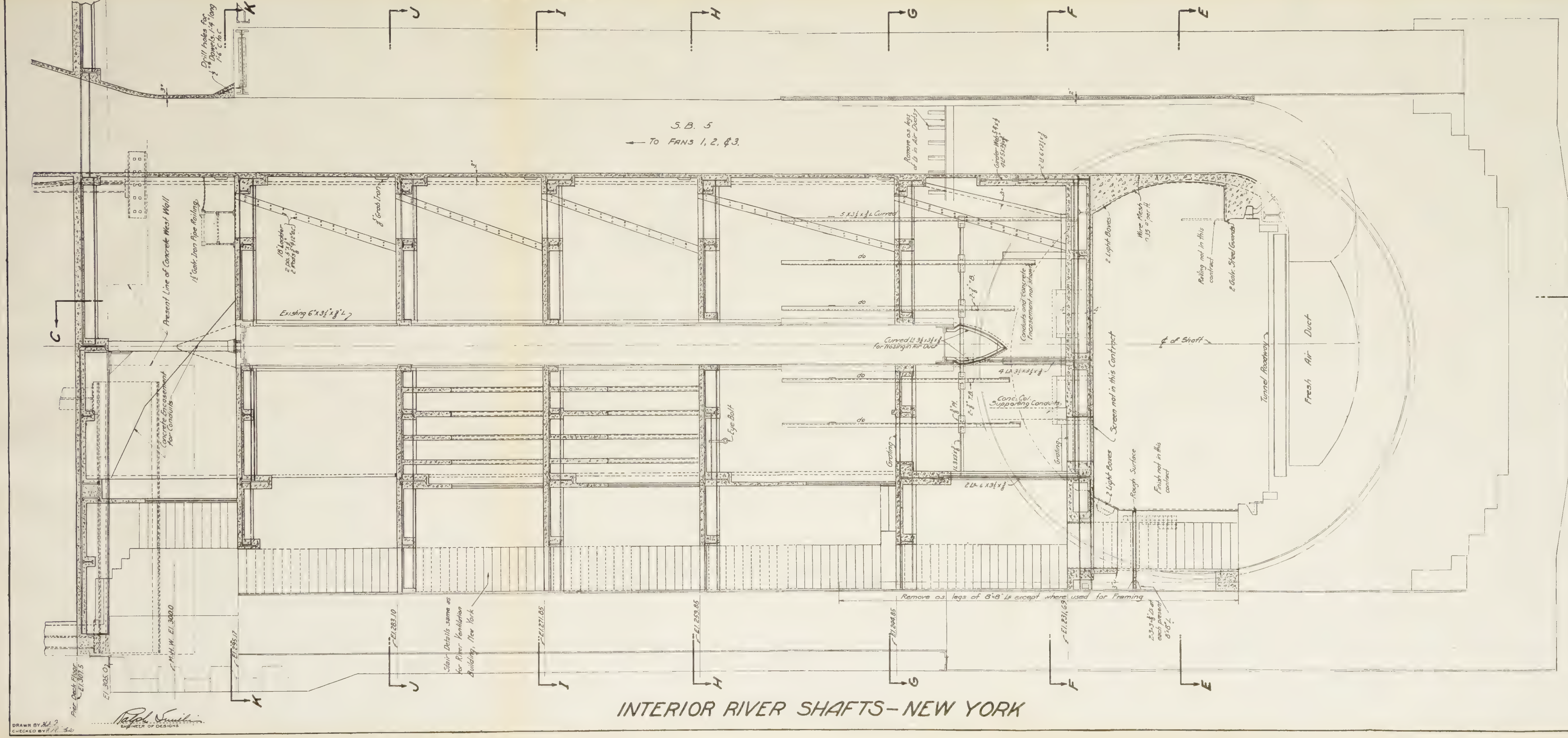
SCALE: 0 1 2 3 FEET

DATE AUGUST 4, 1926

CHIEF ENGINEER

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



For Key Plan see Contract Dwg. No. 131, File No. 1-13
" Sections C-C " " " 129 " " 1-13
" " E-E " " " 131 " " 1-13
" " F-F " " " 132 " " 1-13
" " G-G " " " 133 " " 1-13
" " H-H " " " 134 " " 1-13
" " I-I " " " 135 " " 1-13
" " J-J " " " 136 " " 1-13
" " K-K " " " 137 " " 1-13

For Architectural Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 60 to 84 incl. File No. 1-13

For Steel Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 85 to 99 incl. File No. 1-13

For Electrical Conduit Drawings of River Ventilation Building, N.Y. see Contract Dwgs. Nos. 100 to 109 incl. File No. 1-13

For Structural Drawings of Interior River Shafts, N.Y. see Contract Dwgs. Nos. 129 to 137 incl. File No. 1-13

For Electrical Conduit Drawings of Interior River Shafts, N.Y. see Contract Dwgs. Nos. 138 & 139, File No. 1-13

SECTION A-A
SOUTH SHAFT

INTERIOR RIVER SHAFTS – NEW YORK

DRAWN BY H.A.J.
CHECKED BY R.R. Ed.

Ralph Smillie
ENGINEER OF DESIGNS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 127

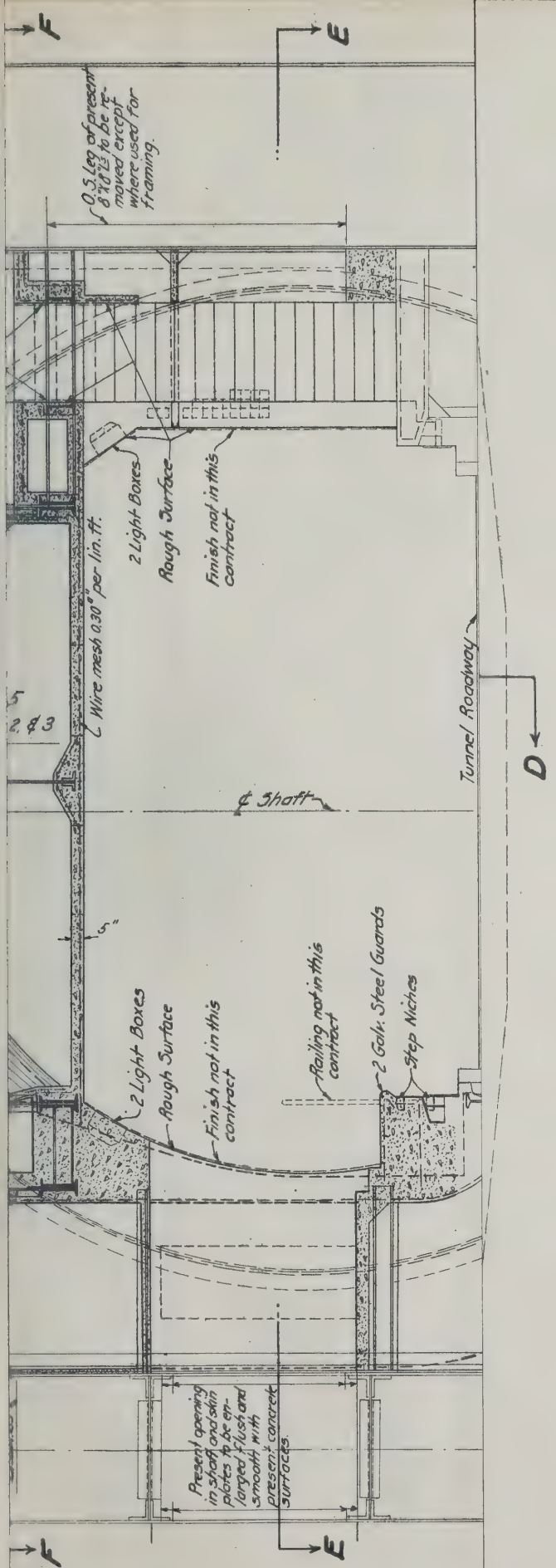
SCALE. 0 1 2 3 FEET

DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co., 37-41 Chambers Street, N. Y.



SECTION B-B
NORTH SHAFT

For Key Plan	see Contract	Dwg. No. 131	File No. 1-13
" Sect. D-D	"	" 130	" 1-13
" " E-E	"	" 131	" 1-13
" " F-F	"	" 132	" 1-13
" " G-G	"	" 133	" 1-13
" " H-H	"	" 134	" 1-13
" " I-I	"	" 135	" 1-13
" " J-J	"	" 136	" 1-13
" " K-K	"	" 137	" 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 128

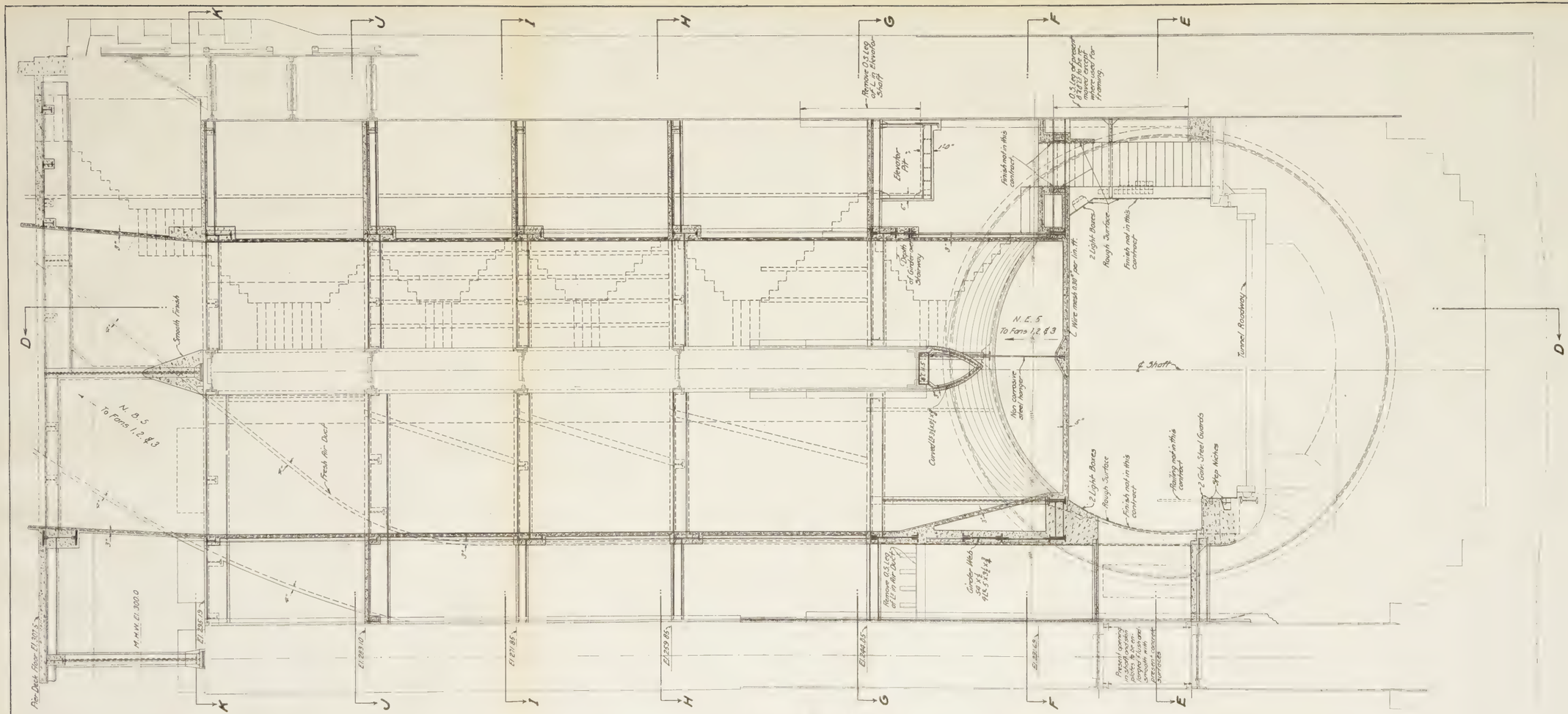
SCALE: 0 1 2 3 FEET

DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



INTERIOR RIVER SHAFTS—NEW YORK

SECTION B-B
NORTH SHAFT

For Key Plan see Contract Dwg. No. 131 File No. 1-13

"	Sect.	O-D	"	"	"	130	"	" 1-13
"	"	E-E	"	"	"	131	"	" 1-13
"	"	F-F	"	"	"	132	"	" 1-13
"	"	G-G	"	"	"	133	"	" 1-13
"	"	H-H	"	"	"	134	"	" 1-13
"	"	I-I	"	"	"	135	"	" 1-13
"	"	J-J	"	"	"	136	"	" 1-13
"	"	K-K	"	"	"	137	"	" 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 128

SCALE 0 1 2 FEET

DATE AUGUST 4, 1925

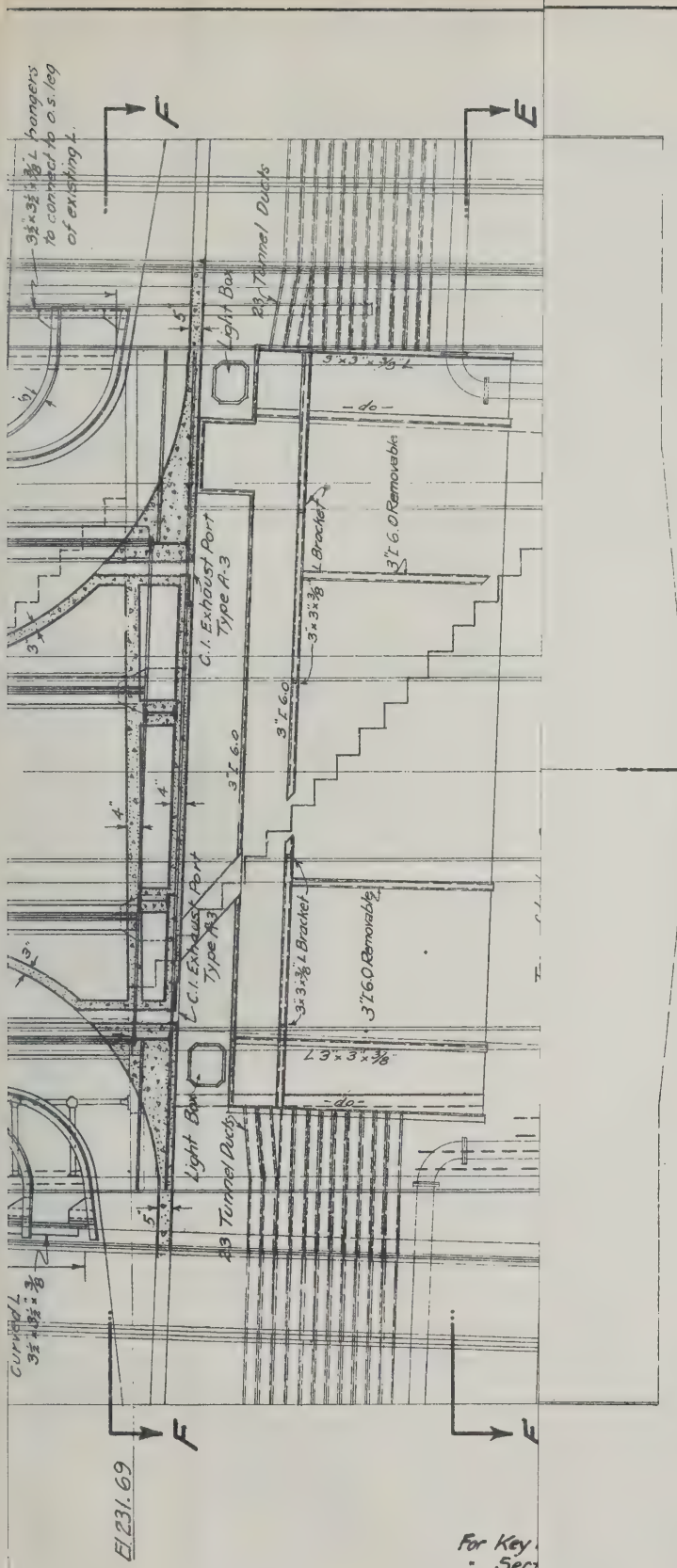
Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

DRAWN BY Z.B.
CHECKED BY C.H. Gu

Patrick Smith
ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N.Y.



SECTION C-C
SOUTH SHAFT

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 129

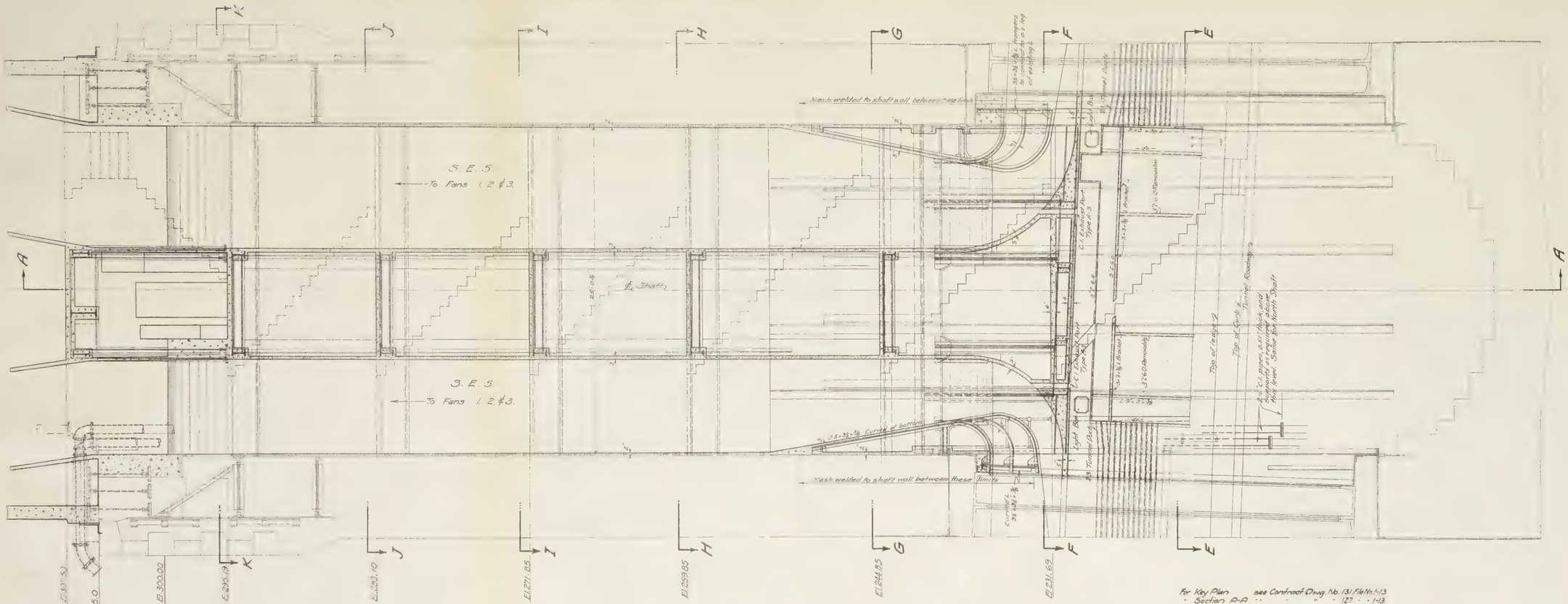
SCALE: 0 1 2 3 FEET

DATE AUGUST 4, 1923

CHIEF ENGINEER

FILE No. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



SECTION C-C
SOUTH SHAFT

INTERIOR RIVER SHAFTS – NEW YORK

For Key Plan see Contract Drwg. No. 131	File No. 1-13
Section A-A	127
E-E	131
F-F	132
G-G	133
H-H	134
I-I	135
J-J	136
K-K	137

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 129

SCALE 0 1 2 3 FEET

DATE AUGUST 6, 1923

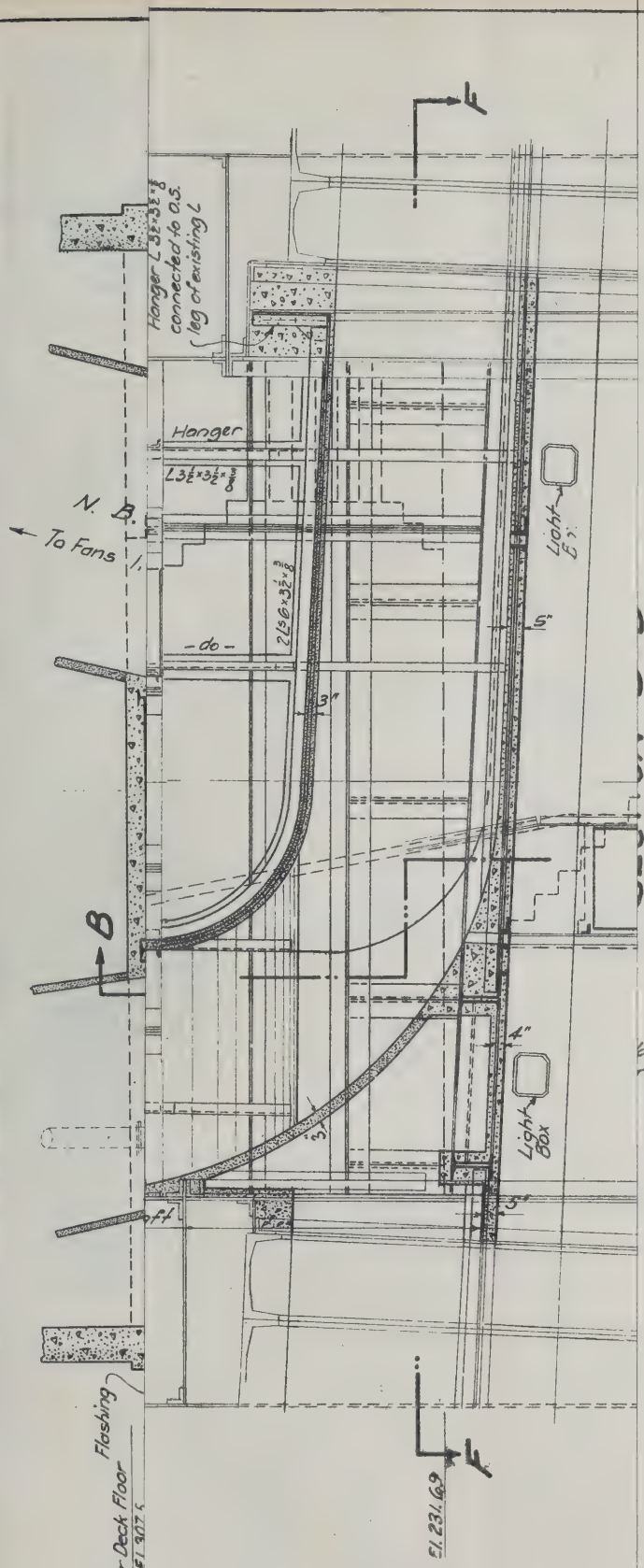
CHIEF ENGINEER

FILE NO. 1-13

DRAWN BY
CHECKED BY

ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



NORTH SHAFT

Plan	see Contract	Dwg. No.	131, File No.	1-13
Section B-B	"	"	"	"	128	" " 1-13
E-E	"	"	"	"	131	" " 1-13
F-F	"	"	"	"	132	" " 1-13
G-G	"	"	"	"	133	" " 1-13
H-H	"	"	"	"	134	" " 1-13
I-I	"	"	"	"	135	" " 1-13
J-J	"	"	"	"	136	" " 1-13
K-K	"	"	"	"	137	" " 1-13

-NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 130

SCALE: 0 1 2 3 FEET

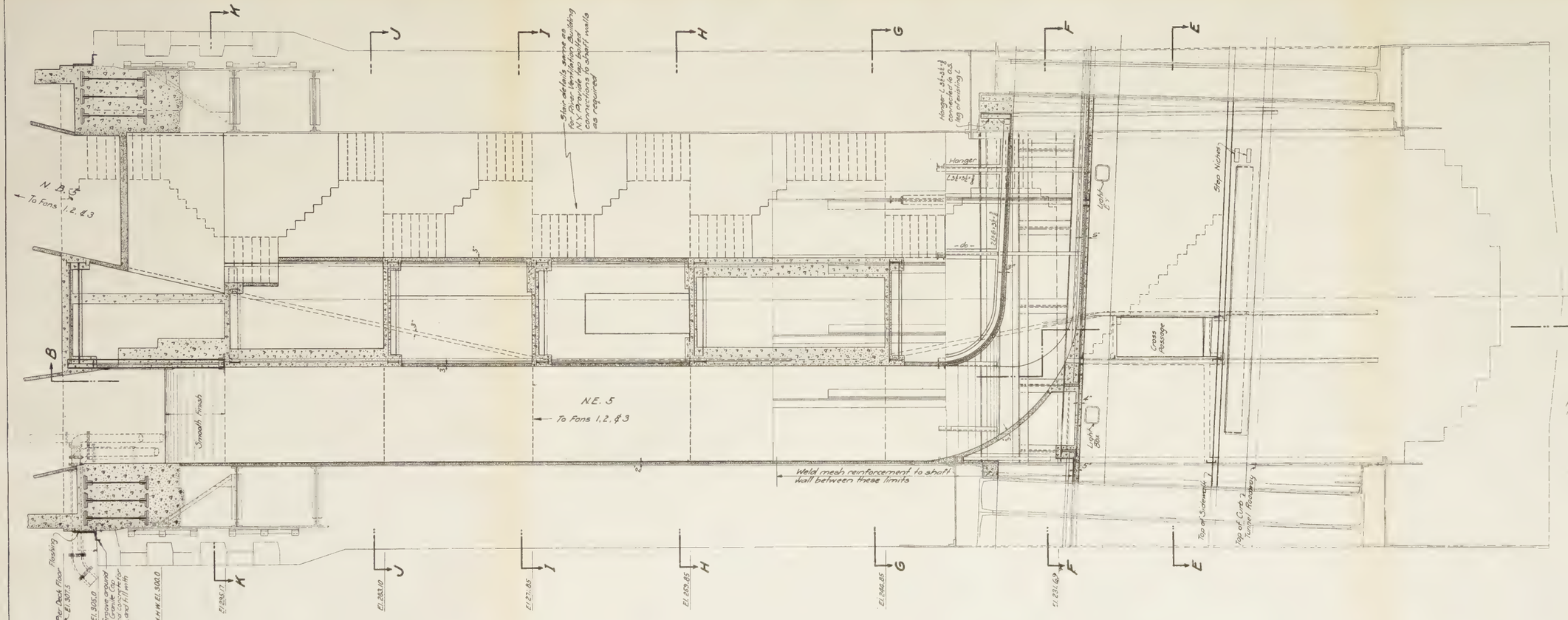
DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO 1-13

DRAWN BY [illegible]
CHECKED BY [illegible]

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



INTERIOR RIVER SHAFTS - NEW YORK

SECTION D-D
NORTH SHAFT

For Key Plan see Contract Dwg. No. 131, File No. I-13
For Section B-B " " " " 128 " " I-13
" " E-E " " " " 131 " " I-13
" " F-F " " " " 132 " " I-13
" " G-G " " " " 133 " " I-13
" " H-H " " " " 134 " " I-13
" " I-I " " " " 135 " " I-13
" " J-J " " " " 136 " " I-13
" " K-K " " " " 137 " " I-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 130

SCALE 0 1 2 3 FEET

DATE AUGUST 6, 1925

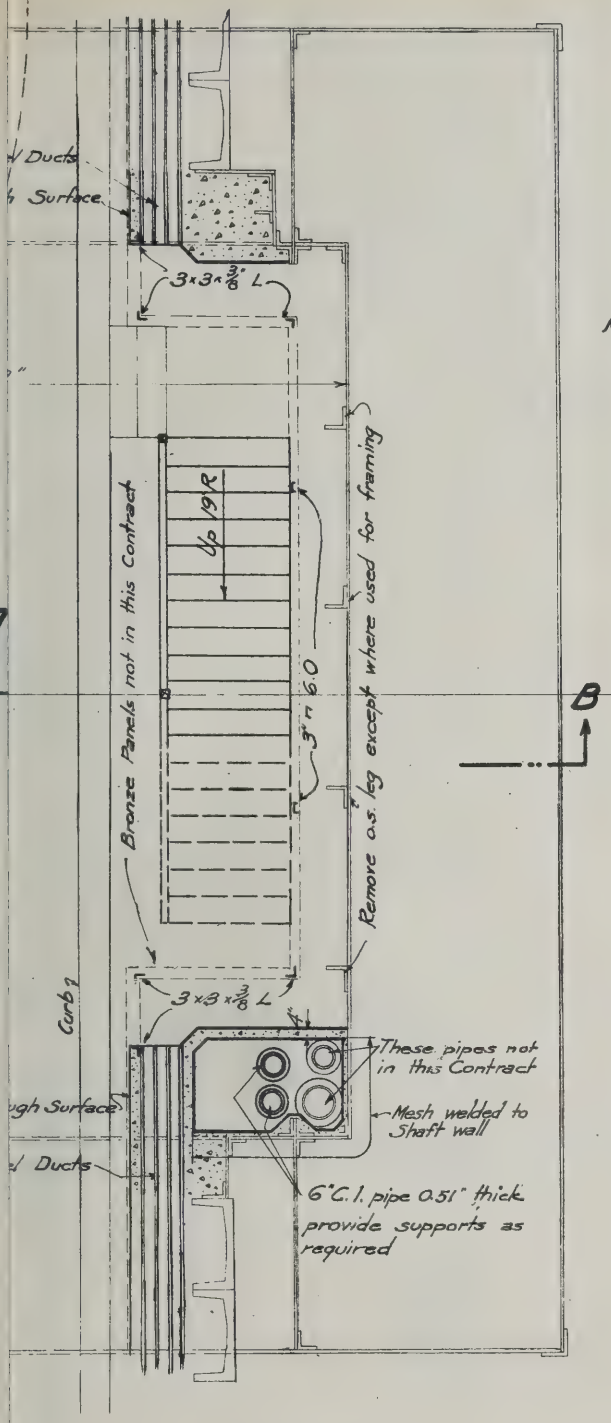
Ole Singstad
CHIEF ENGINEER

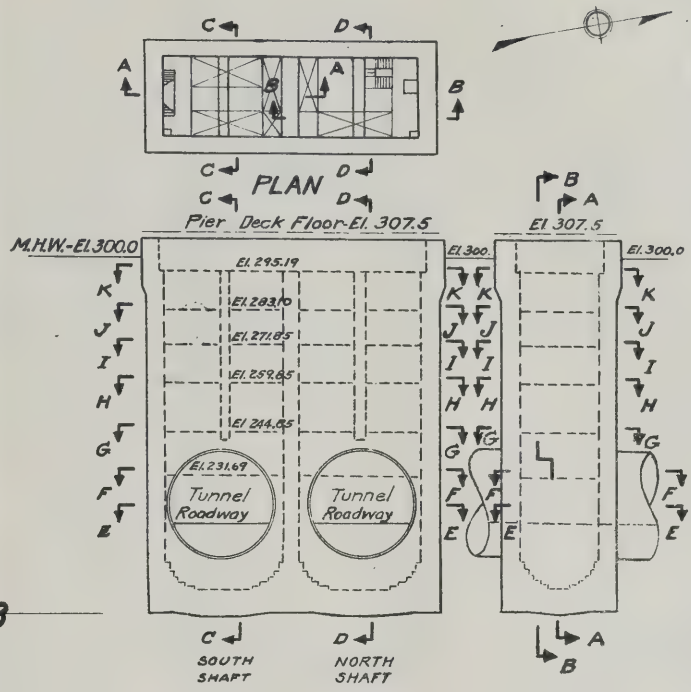
FILE NO. I-13

DRAWN BY RJS
CHECKED BY O.F.E.

Robert J. Smith
ASSISTANT ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
17-41 Chambers Street, N. Y.





KEY PLAN

For Section A-A ..... See Contract Drwg. No. 127 File No. I-13
For " B-B ..... " " " 128 " " I-13
For " C-C ..... " " " 129 " " I-13
For " D-D ..... " " " 130 " " I-13

Ⓝ Denotes size and Type of Door.
See Architectural Drawings of Land & River Ventilation Buildings N.Y. Contract Dwgs Nos. 28 & 83 File No. I-13.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 131

SCALE: 0 1 2 3 FEET

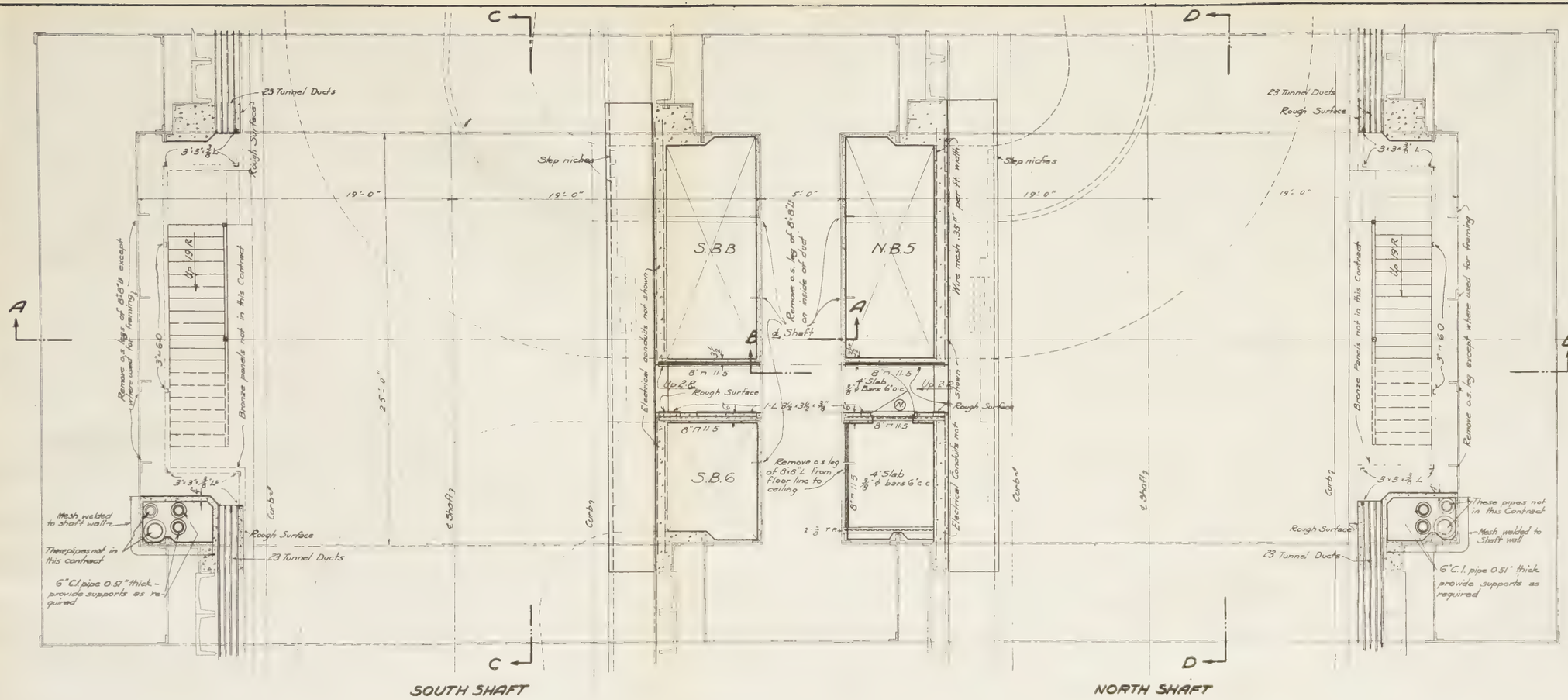
DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

DRAWN
CHECKED

FILE NO. I-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



SECTION E-E

INTERIOR RIVER SHAFTS - NEW YORK

For Section A-A ..... See Contract Drwg. No. 127 File No. I-13
For " B-B ..... " " " 128 " " I-13
For " C-C ..... " " " 129 " " I-13
For " D-D ..... " " " 130 " " I-13

Ⓝ Denotes size and Type of Door.
See Architectural Drawings of Land & River Ventilation Buildings N.Y. Contract Dwgs Nos. 28 & 83 File No. I-13.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 131

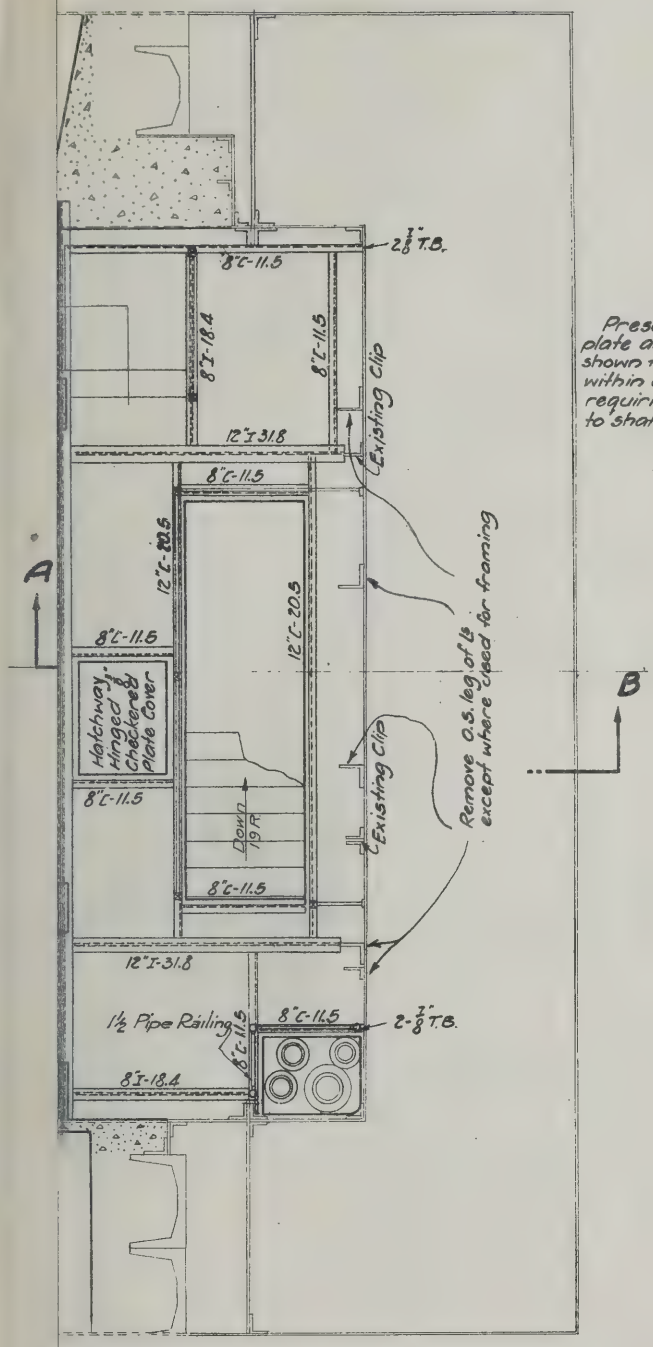
SCALE 0 1 2 3 FEET
DATE AUGUST 4, 1928

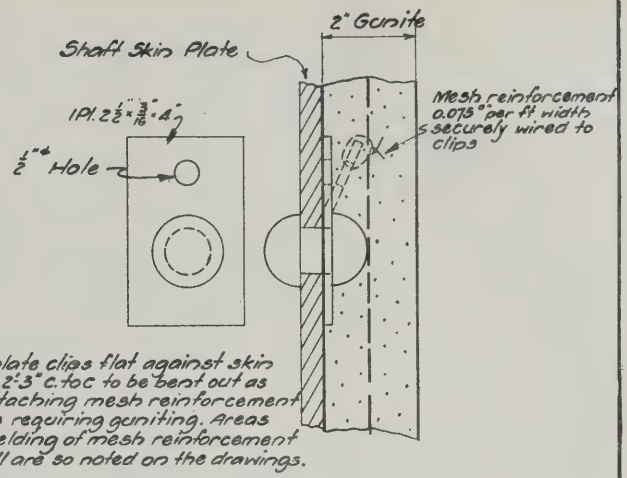
Ole Singstad
CHIEF ENGINEER

FILE NO. I-13

DRAWN BY J.F.R.
CHECKED BY Ralph Smith
ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.





Present plate clips flat against skin plate about 2'-3" c. to c. to be bent out as shown for attaching mesh reinforcement within areas requiring guniting. Areas requiring welding of mesh reinforcement to shaft wall are so noted on the drawings.

DETAIL OF CLIPS ON SHAFT WALL

SCALE 0 1 2 3 INCHES

For	Key Plan	see	Contract	Dwg.	No.	131	File	No.	1-13
"	Sect. A-A	"	"	"	"	127	"	"	1-13
"	" B-B	"	"	"	"	128	"	"	1-13
"	" C-C	"	"	"	"	129	"	"	1-13
"	" D-D	"	"	"	"	130	"	"	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 132

SCALE: 0 1 2 3 FEET

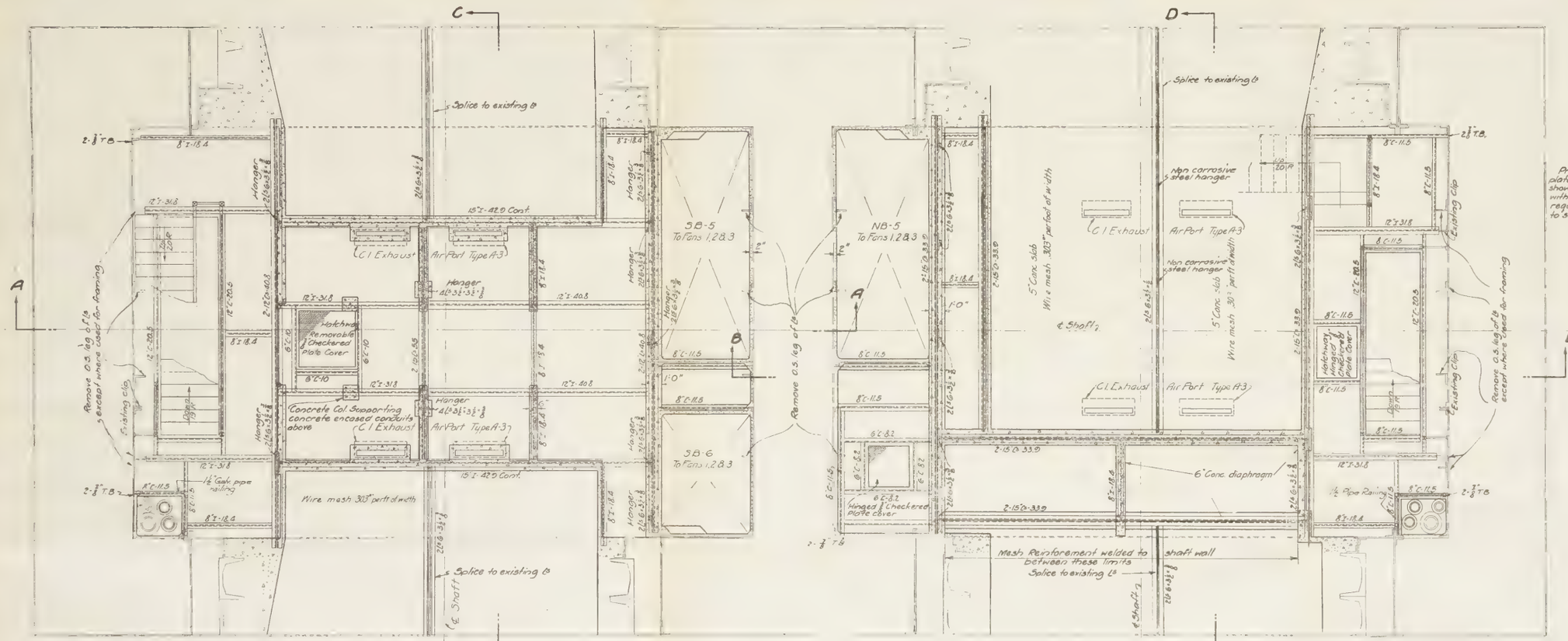
DATE AUGUST 4, 1928.

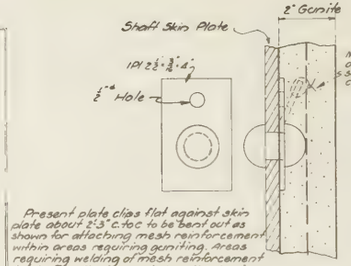
Ole Singstad
CHIEF ENGINEER

DRAWN BY:
CHECKED BY:

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37 41 Chambers Street, N. Y.



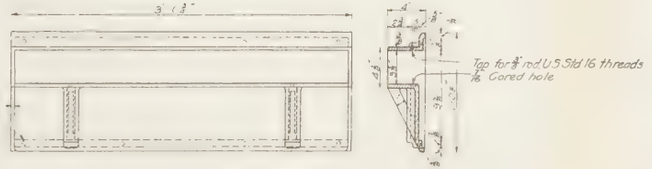


Present plate clips flat against skin plate about 2'-3" C. to C. to be bent out as shown for attaching mesh reinforcement within areas requiring guniting. Areas requiring welding of mesh reinforcement to shaft wall are so noted on the drawings.

DETAIL OF CLIPS ON SHAFT WALL

SCALE 0 1 2 3 INCHES

For Key Plan see Contract Dwg. No. 131 File No. 1-13
" Sect A-A " " " 127 " " 1-13
" " B-B " " " 128 " " 1-13
" " C-C " " " 129 " " 1-13
" " D-D " " " 130 " " 1-13



DETAIL OF CAST IRON EXHAUST AIR PORT TYPE A-3

SECTION F-F

Elev. 23.16 ⊙

INTERIOR RIVER SHAFTS - NEW YORK

NEW YORK STATE BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 132

SCALE 0 1 2 FEET

DATE AUGUST 4, 1928.

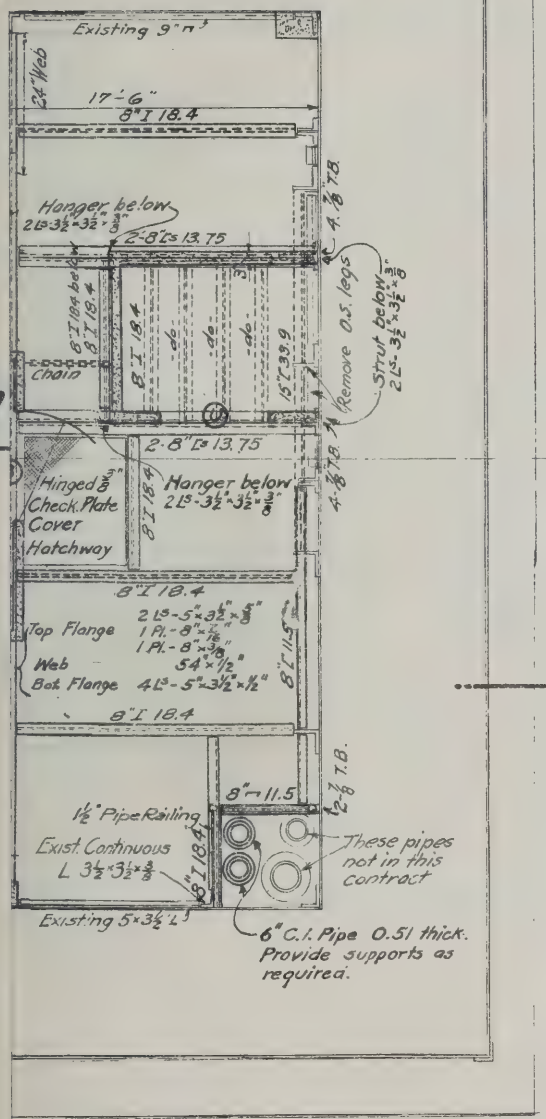
Drawn by: S. N. J.
Checked by: R. J. S. — E. W.

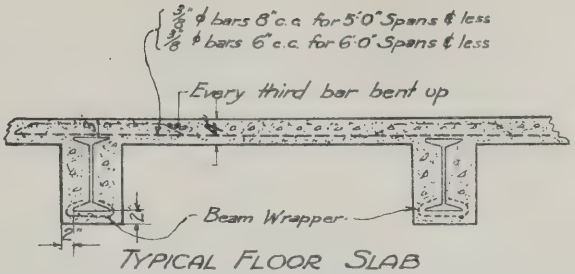
Robert J. Smith
CHIEF DRAFTSMAN OF DESIGN

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co., 47-41 Chambers Street, N. Y.





TYPICAL FLOOR SLAB
SECTIONS G-G, H-H, I-I, J-J ℄ K-K
Scale 0 1 2 3 Feet

Typical details of gunite partitions and for reenforcement see Architectural Drawings of River Ventilation Building, N.Y. Contract drawings Nos. 64 ℄ 83

Existing outstanding legs of Angles requiring removal adjacent to stairways and passageways shall be made smooth and free of burrs and sharp edges.

All interior air duct surfaces to be smooth finish.

For Key Plan see Contract Dwg. No. 131 File No. 1-13
" Sect. A-A " " " " 127 " " 1-13
" " B-B " " " " 128 " " 1-13
" " C-C " " " " 129 " " 1-13
" " D-D " " " " 130 " " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 133

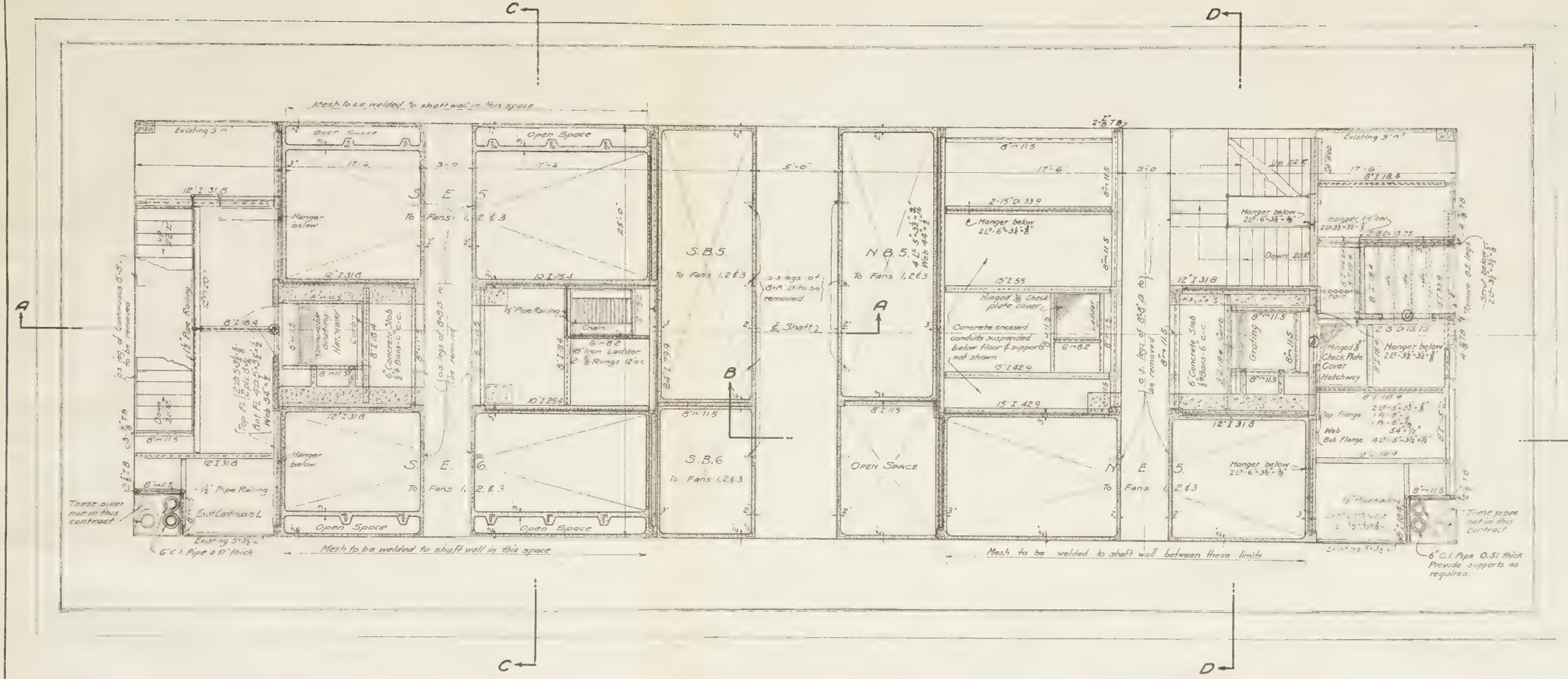
SCALE: 0 1 2 3 FEET DATE AUGUST 4, 1923

Ole Singstad
CHIEF ENGINEER

DRAWN
CHECKED

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

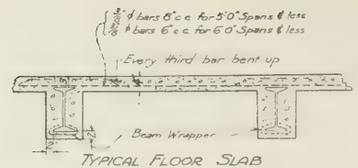

C
D
A
B
Mesh to be welded to shaft wall in this space
Existing 5'-0"
Open Space
Hanger below
To Fans 1, 2 & 3
S. E. 5
S. E. 6
S.B.5
To Fans 1,2 & 3
S.B.6
To Fans 1,2 & 3
N.B.5
To Fans 1,2 & 3
OPEN SPACE
N. E. 5
To Fans 1,2 & 3
Existing 9'-0"
Up 22.E
Down 20.E
Hanger below 2L3-6-3½-⅞
Hinged ⅛ Check plate cover
Concrete encased conduits suspended below floor & supports not shown
Ladder
6 n 8.2
18 Iron Ladder ⅝ Rungs 12"oc
Chain
½" Pipe Railing
Grating
Hinged ⅛ Check Plate Cover Hatchway
Hanger below 2L3-3½-3½-⅞
Top Flange 2 L 5-5-⅞ 1 PL-8-⅜ 1 PL-8-⅜ 54.4-7½
Web Bot. Flange 4 L 5-5-3½-½
Concrete Slab 6" & Bars 6" c.c.
Remove 0.S. legs of 8"x8"x1⅛ Angles
Remove 0.S. legs of 8"x4"x⅞ Angles
Remove 0.S. legs of 8"x4"x⅞ Angles for 3'-0" (8"x4"x⅞ to be removed)
Remove 0.S. legs of 8"x8"x1⅛ Angles (to be removed)
Remove 0.S. legs of 8"x8"x1⅛ Angles (to be removed)
Remove 0.S. legs of 8"x4"x⅞ Angles (to be removed)
Top Fl. 2 PL 8-⅜
Bot Fl. 4 L 5-5-3½-⅞
Web 54"-½
Removable Grating Hatchway
Damp Proofing
These pipes not in this contract
Existing 5'-3½"
6" C.I. Pipe 0.51" thick
Existing Continuous L
Mesh to be welded to shaft wall in this space
Mesh to be welded to shaft wall between these limits
6" C.I. Pipe 0.51 thick Provide supports as required.
These pipes not in this contract

SOUTH SHAFT

NORTH SHAFT

SECTION G-G

Elev. 244.85



TYPICAL FLOOR SLAB
SECTIONS G-G, H-H, I-I, J-J & K-K
Scale 0 Feet

Typical details of gunite partitions and for reenforcement see Architectural Drawings of River Ventilation Building, N.Y. Contract drawings Nos. 64 & 83

Existing outstanding legs of Angles requiring removal adjacent to stairways and passageways shall be made smooth and free of burrs and sharp edges.

All interior air duct surfaces to be smooth finish.

For Key Plan see Contract Dwg. No. 131 File No. 1-13
" Sect A-A " " " " 127 " " 1-13
" " B-B " " " " 128 " " 1-13
" " C-C " " " " 129 " " 1-13
" " D-D " " " " 130 " " 1-13

INTERIOR RIVER SHAFTS-NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No 133

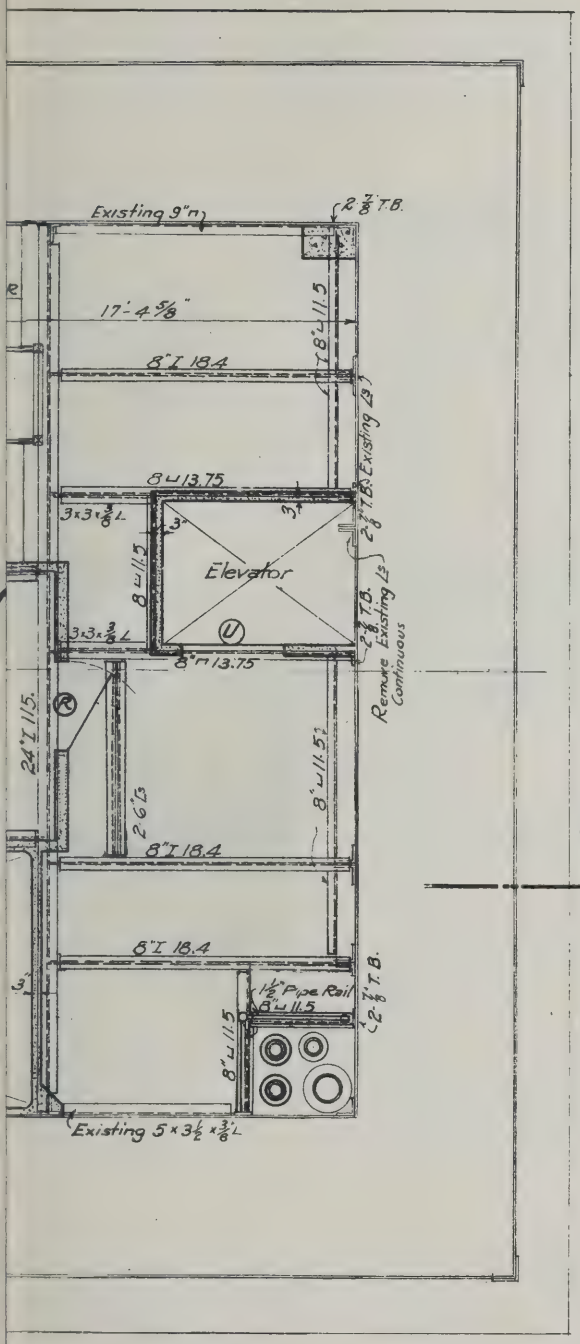
SCALE 0 1 2 3 FEET DATE AUGUST 4, 1928

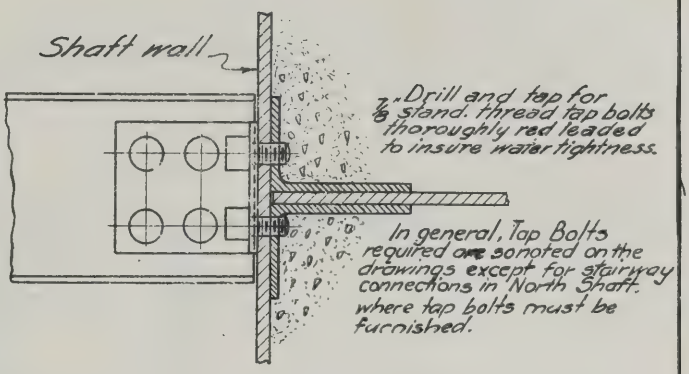
Ole Singstad
CHIEF ENGINEER

DRAWN BY H.H.J.
CHECKED BY O.S. & R.S.
Ralph Smith
ENGINEER OF DESIGNS

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.




Shaft wall
1" Drill and tap for 7/8 stand. thread tap bolts thoroughly red leaded to insure water tightness.
In general, Tap Bolts required are so noted on the drawings except for stairway connections in North Shaft. where tap bolts must be furnished.

TYPICAL TAP BOLT CONNECTION

SCALE 0 1 2 3 4 5 6 INCHES

For Key Plan, See Contract Dwg. No. 131, File No. 1-13
" Section A-A, " " " " 127, " " 1-13
" " B-B, " " " " 128, " " 1-13
" " C-C, " " " " 129, " " 1-13
" " D-D, " " " " 130 " " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 134

SCALE: 0 1 2 3 FEET

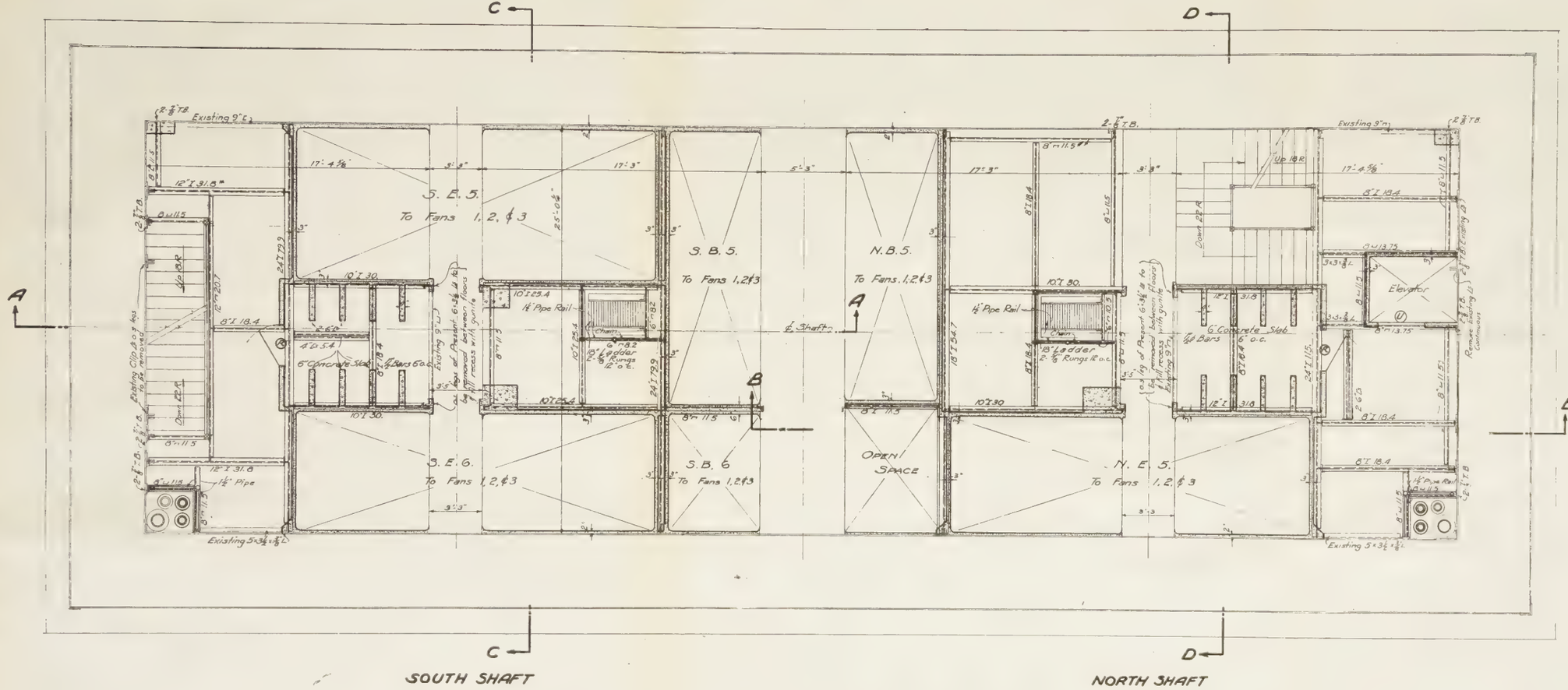
DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

DRAWN
CHECKED

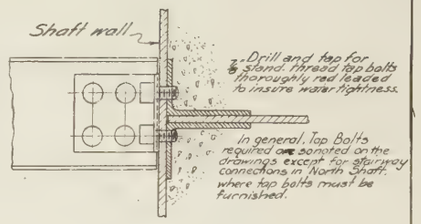
FILE NO. 1-13

M. B. Brown Printing & Binding Co
37-41 Chambers Street, N. Y.



SECTION H-H

ELEV. 259.85


Shaft wall
⅞" Drill and tap for ⅞ stand. thread tap bolts thoroughly rad leaded to insure water tightness.
In general, Tap Bolts required are omitted on the drawings except for stairway connections in North Shaft, where tap bolts must be furnished.

TYPICAL TAP BOLT CONNECTION

SCALE 0 1 2 3 4 INCHES

For Key Plan, See Contract Dwg. No. 131, File No. 1-13
" Section H-H, " " " " 127, " " 1-13
" " B-B, " " " " 128, " " 1-13
" " C-C, " " " " 129, " " 1-13
" " D-D, " " " " 130, " " 1-13

INTERIOR RIVER SHAFTS - NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION

NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 134

SCALE 0 1 2 3 FEET

DATE AUGUST 4, 1925

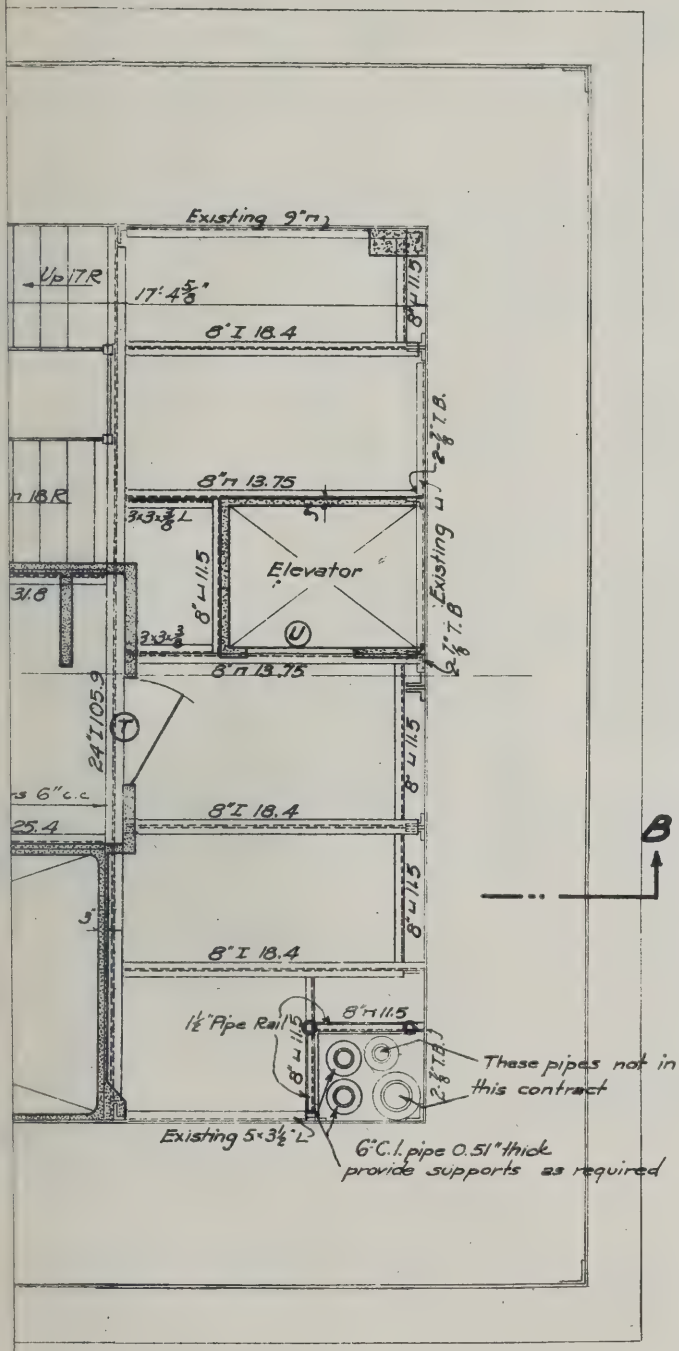
Ole Singstad
CHIEF ENGINEER

FILE No. 1-13

DRAWN BY J.J.F.
CHECKED A. [illegible]

Robt. Smith
ENGINEER OF DESIGN

M. B. Brown Printing & Binding Co
37-41 Chambers Street, N. Y.



For Key Plan	see	Cotract	Drwg. No.	131	File No	1-13
For Section	A-A	"	"	"	"	127	"	"	1-13
For	"	B-B	"	"	"	"	128	"	"	1-13
For	"	C-C	"	"	"	"	129	"	"	1-13
For	"	D-D	"	"	"	"	130	"	"	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 135

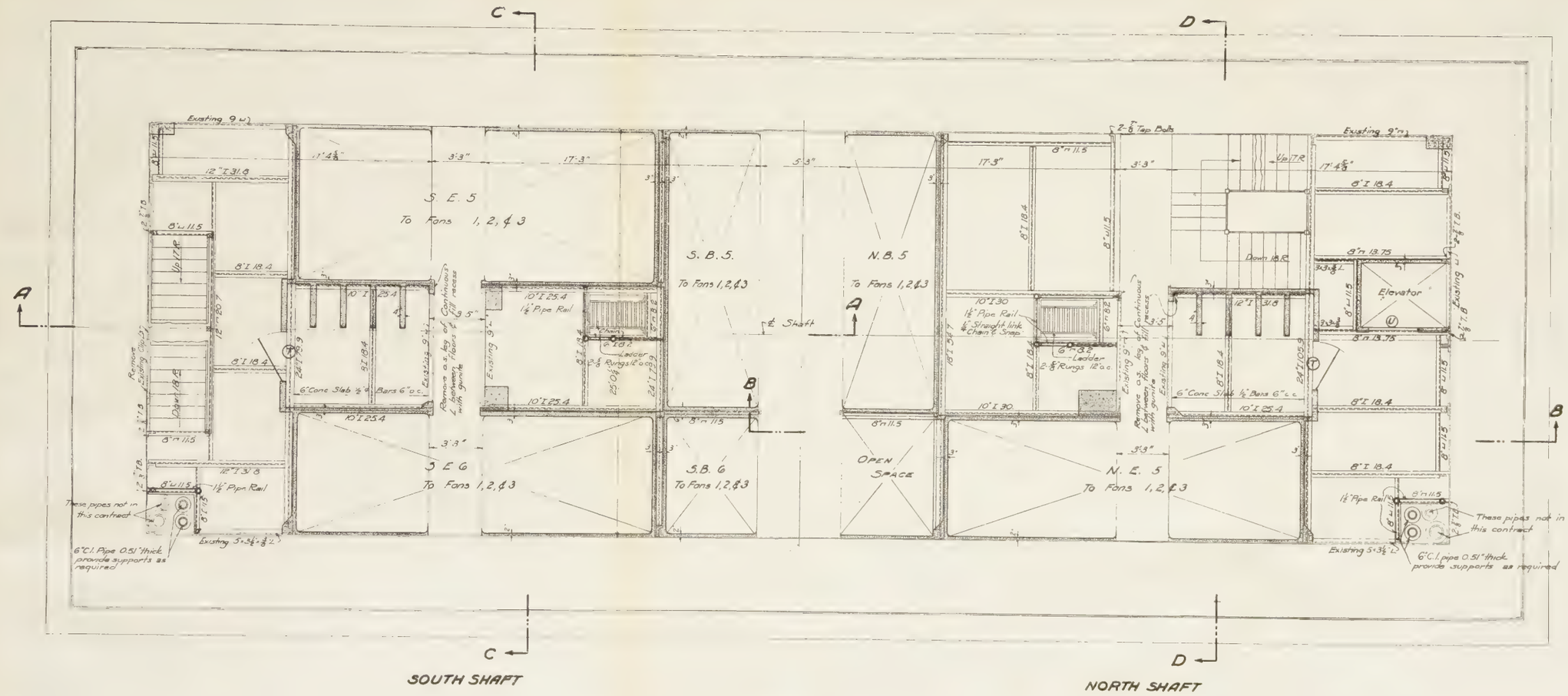
SCALE: 0 1 2 3 FEET

DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


C
D
A
B
Existing 9"w
S. E. 5
To Fans 1, 2, & 3
S. B. 5.
To Fans 1, 2, & 3
N. B. 5
To Fans 1, 2, & 3
℄ Shaft
S. E. 6
To Fans 1, 2, & 3
S. B. 6
To Fans 1, 2, & 3
OPEN SPACE
N. E. 5
To Fans 1, 2, & 3
Elevator
Down 18.6
Remove Existing Curb
Remove a.s. key of Continuous Gutterway Floors & fill recess with gunite
Existing 9"w
6" Cone Slab ½" Bars 6" c.c.
Ladder 2-⅝" Rungs 12" c.c.
1½" Pipe Rail
1½" Straight link Chain & Snap
These pipes not in this contract
6" C.I. Pipe 0.51" thick provide supports as required
Existing 5'-3½" ℄
For Key Plan see Cotract Drwg. No. 131 File No 1-13
For Section A-A " " " " 127 " " 1-13
For " B-B " " " " 128 " " 1-13
For " C-C " " " " 129 " " 1-13
For " D-D " " " " 130 " " 1-13

SOUTH SHAFT

NORTH SHAFT

SECTION I-I

ELEV. 27.185

INTERIOR RIVER SHAFTS – NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 135

SCALE 0 1 2 3 FEET

DATE AUGUST 6, 1925

CHIEF ENGINEER

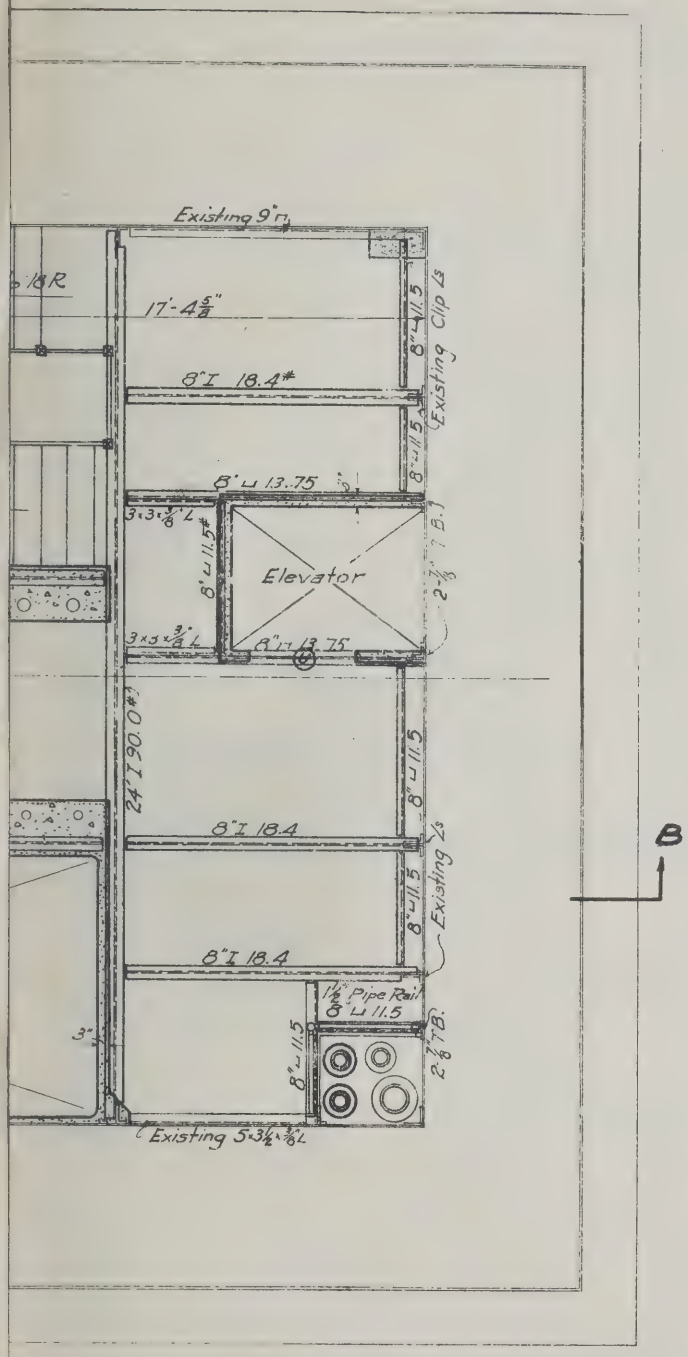
FILE NO 1-13

DRAWN BY J.F.R.

CHECKED BY

ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



For Key Plan		see Contract Dwg. No.	131,	File No.	1-13
For Section	A-A	"	"	127	"	1-13
"	B-B	"	"	128	"	1-13
"	C-C	"	"	129	"	1-13
"	D-D	"	"	130	"	1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 136

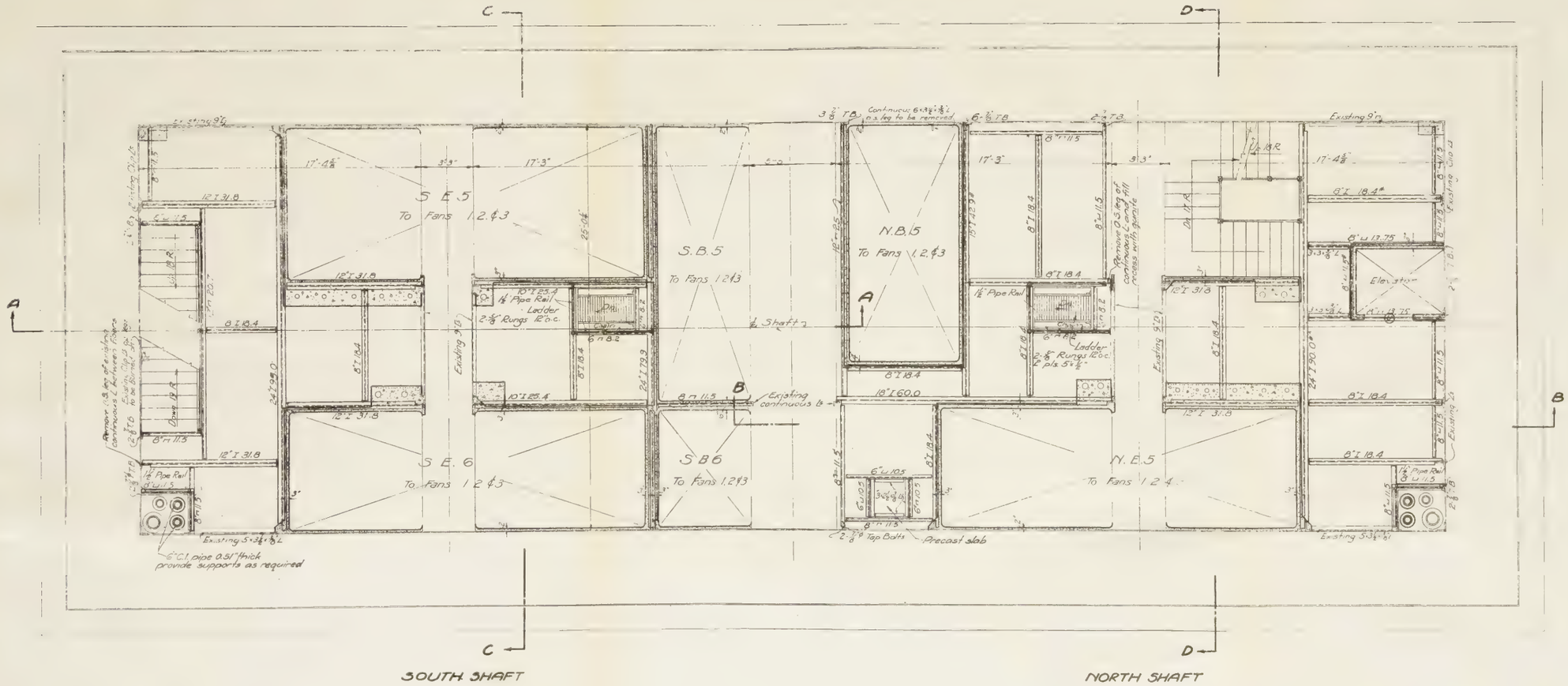
SCALE: 0 1 2 3 FEET

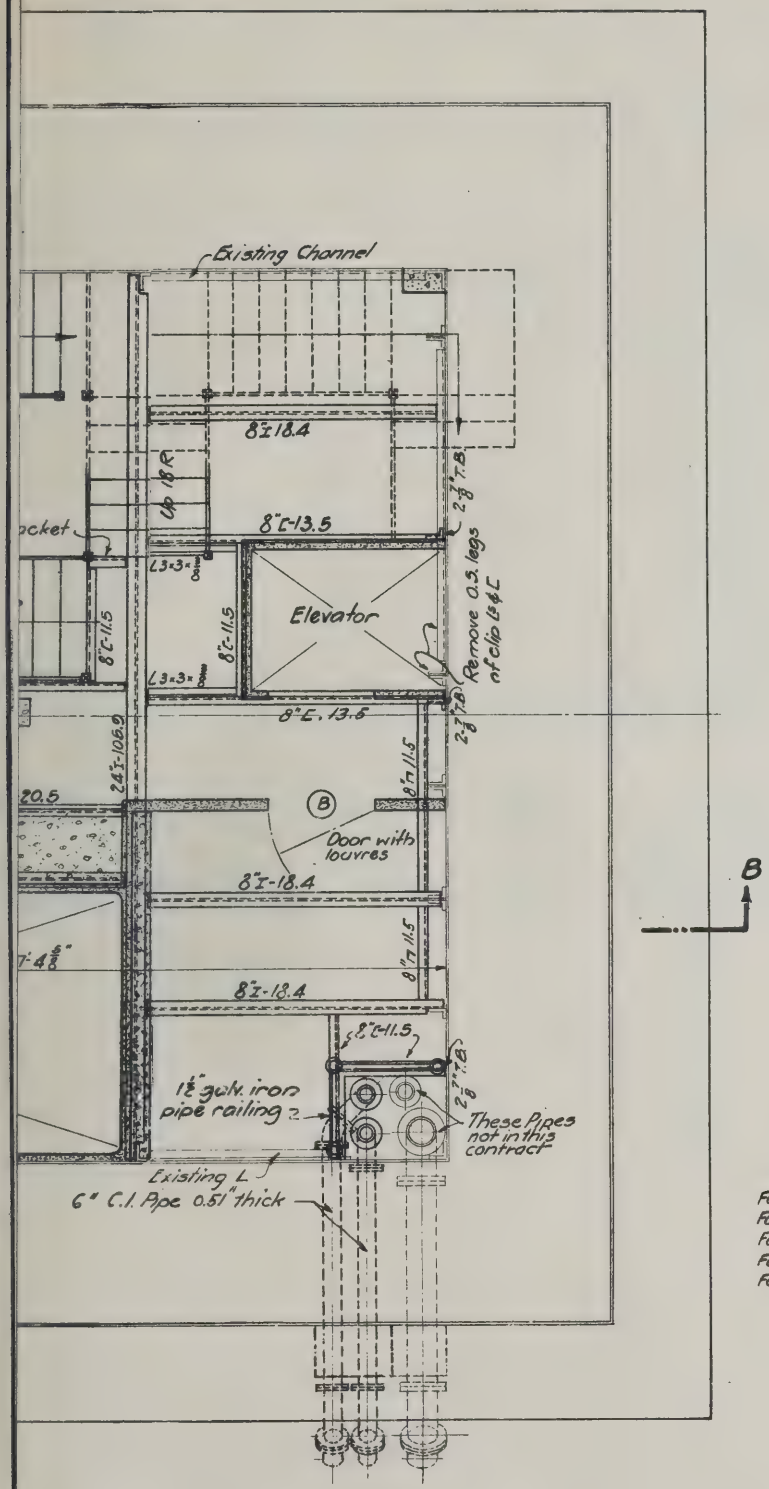
DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


C
D
A
B
S.E.5
To Fans 1.2 & 3
S.B.5
To Fans 1.2 & 3
N.B.5
To Fans 1.2 & 3
S.E.6
To Fans 1.2 & 3
S.B.6
To Fans 1.2 & 3
N.E.5
To Fans 1.2 & 4
Existing 9'0" Existing Curb
17'-4⅝"
3'-3"
17'-3"
25'-0"
12" I 31.8
8" I 18.4
8" I 11.5
12" I 31.8
24" I 90.0
8" I 18.4
8" I 11.5
8" I 18.4
8" I 11.5
8" I 18.4
8" I 11.5



For key Plan ..... see Contract Dwg. No 131 File No. 1-13
For Section A-A ..... " " " " 127 " " 1-13
For " B-B ..... " " " " 128 " " 1-13
For " C-C ..... " " " " 129 " " 1-13
For " D-D ..... " " " " 130 " " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 137

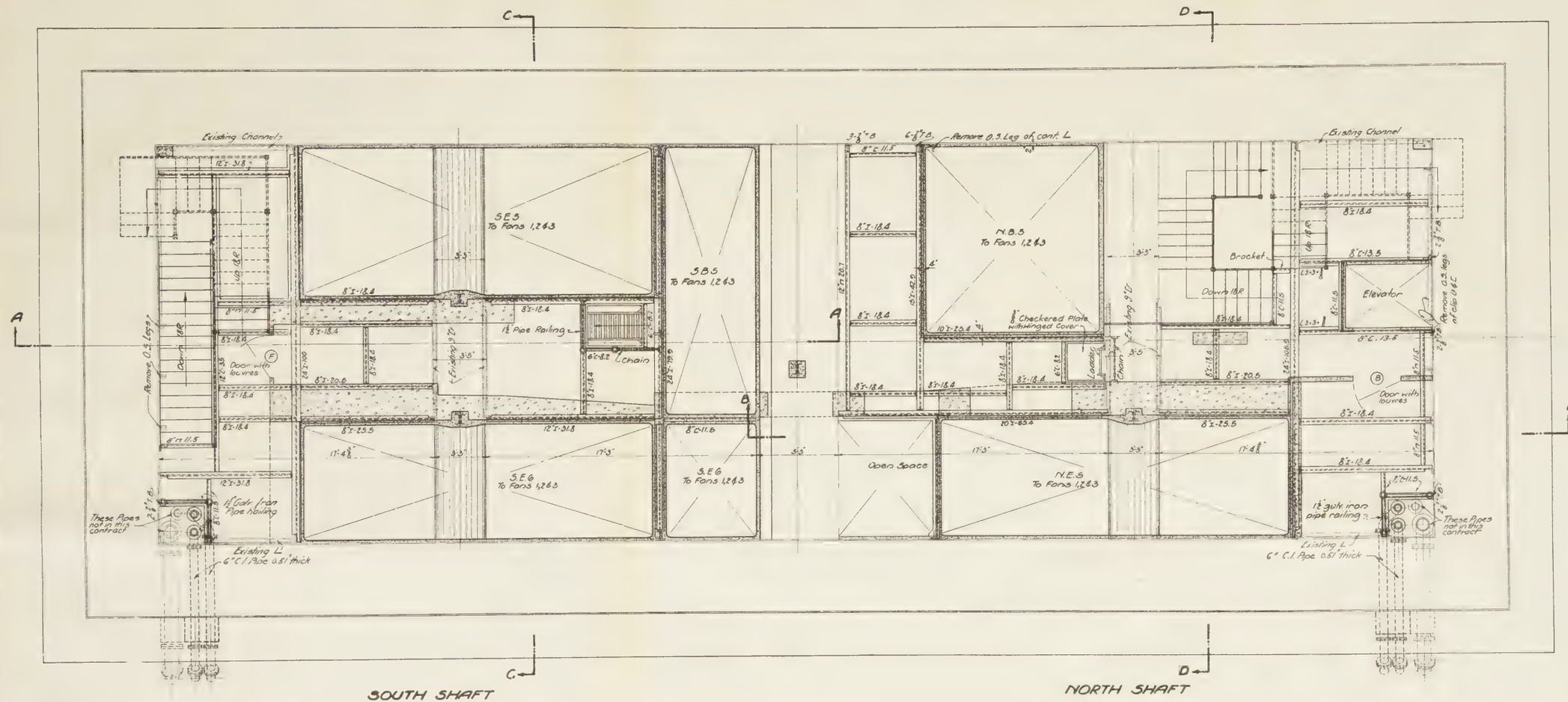
SCALE: 0 1 2 FEET

DATE AUGUST 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



SECTION K-K

Elev. 29.5.19

INTERIOR RIVER SHAFTS—NEW YORK

For key Plan ..... see Contract Dwg. No 131 File No. 1-13
For Section A-A ..... " " " 127 " " 1-13
For " B-B ..... " " " 128 " " 1-13
For " C-C ..... " " " 129 " " 1-13
For " D-D ..... " " " 130 " " 1-13

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 137

SCALE 1" = 1 FOOT

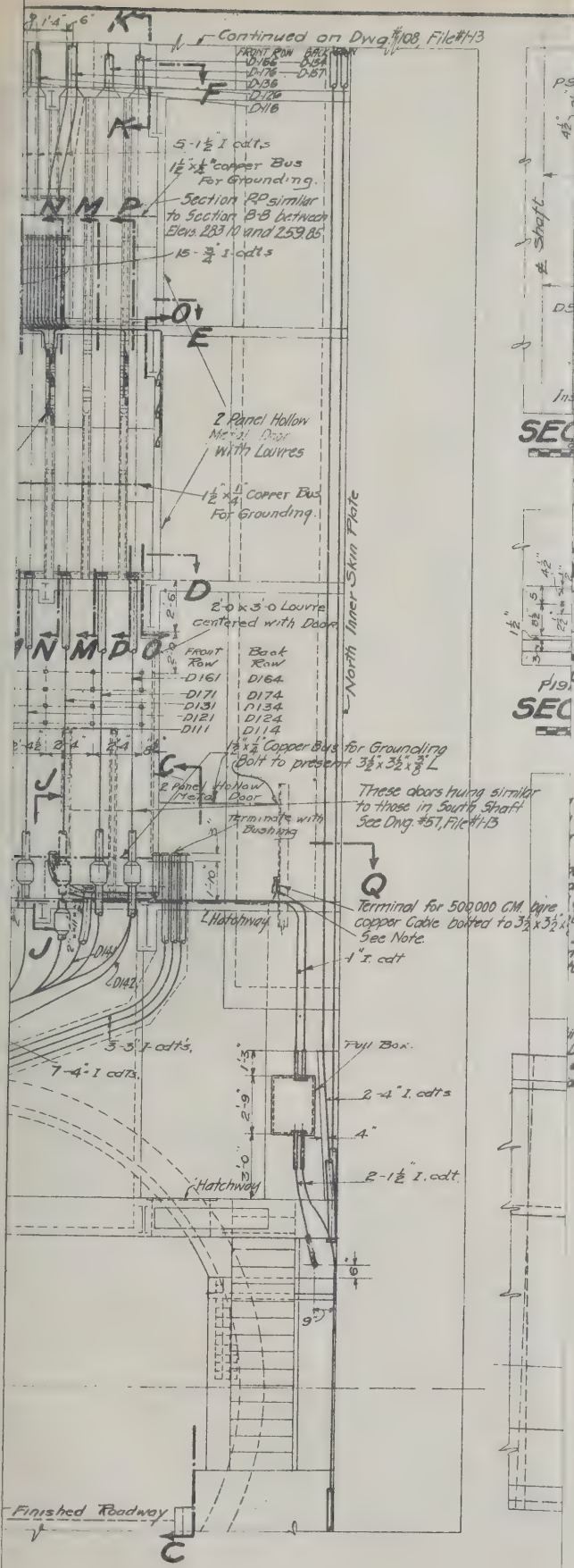
DATE AUGUST 4 1919

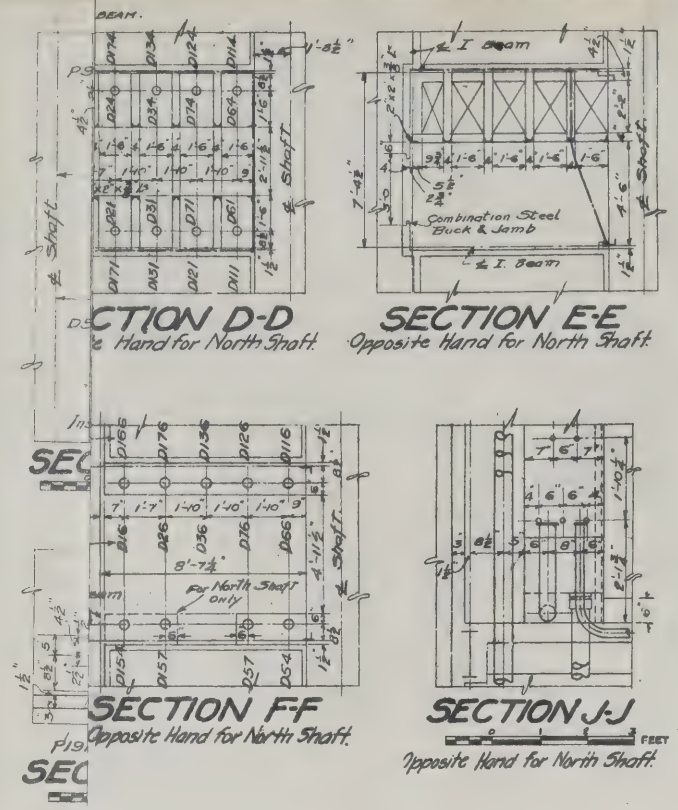
Ole Singstad
CHIEF ENGINEER

FILE NO 1-13

Drawn by [illegible]
Checked by [illegible]
Rudolph Hering
ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.


Continued on Dwg #108, File #1-13
5-1½" I cdts.
1½"x½" Copper Bus For Grounding.
Section RP similar to Section B-B between Elevs. 283.10 and 259.85
15-¾" I cdts.
2 Panel Hollow Metal Door With Louvres
1½"x¼" Copper Bus For Grounding.
2'-0"x3'-0" Louvre centered with Door
North Inner Skin Plate
Front Row / Back Row
D161 / D164
D171 / D174
D131 / D134
D121 / D124
D111 / D114
1½"x¼" Copper Bus for Grounding Bolt to present 3½"x3½"x¾" L
2 Panel Hollow Metal Door
These doors hung similar to those in South Shaft See Dwg. #57, File #1-13
Terminals with Bushing
Terminal for 500,000 C.M. Wire copper Cable bolted to 3½"x3½"x
See Note.
Hatchway
1" I. cdt
3-3" I. cdts.
7-4" I. cdts.
Pull Box.
2-4" I. cdts
4"
2-1½" I. cdt.
Hatchway
Finished Roadway



conduits ¾" iron unless otherwise noted
¾" conduits terminating in boxes to be closed with capped bushings;
conduits terminating in boxes to be closed with pennies under the
here conduits having the same mark, appear on different floors, the
of same includes the vertical run.
ground connections to be spliced and soldered. Where ground cables
ected to steel, the surface thereof should be sandpapered, until shining
just before connection is made.
nduits terminating above or below floor slab to be threaded and capped
to 1'-0" above or below floor slab.

REFERENCE DWGS.

ing System River Shafts, N.Y. see Contract Dwg # 139	File # 1-13	
Details of Sheet Iron Pull Box	# 58	1-13
of Cast Iron Pull Boxes	# 59	1-13
or River Shafts, N.Y.	#127-1-137	1-13

DUIT SYSTEM
AFTS. NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 138.

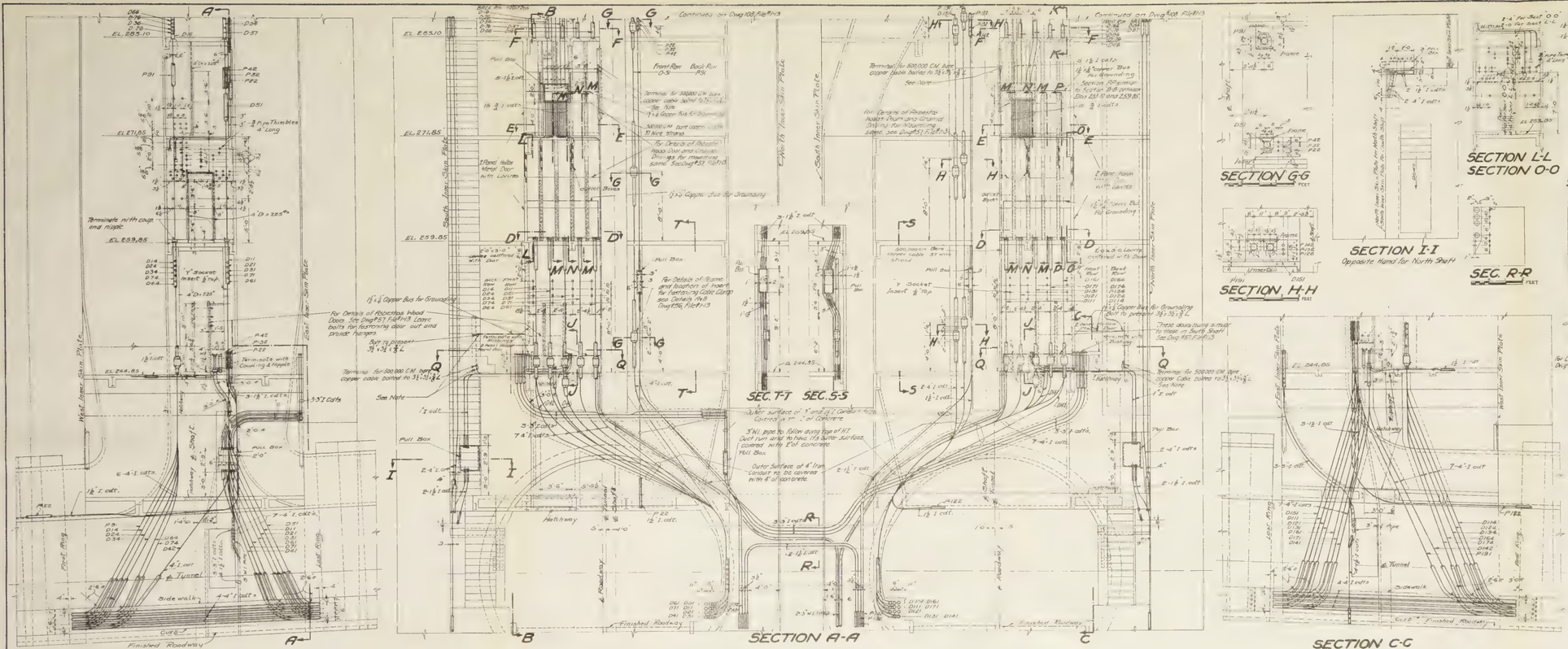
SCALE: 0 1 2 3 4 5 FEET. EXCEPT AS SHOWN

DATE AUG 4, 1925

Ole Singstad
CHIEF ENGINEER

FILE NO 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



SECTION B-B

SECTION A-A

SECTION C-C

SECTION G-G

SECTION I-I
Opposite Hand for North Shaft

SECTION L-L
SECTION O-O

SECTION N-N
Opposite Hand for North Shaft

SECTION D-D
Opposite Hand for North Shaft

SECTION E-E
Opposite Hand for North Shaft

SECTION H-H

SEC. R-R

SECTION M-M
Opposite Hand for North Shaft

SECTION F-F
Opposite Hand for North Shaft

SECTION J-J
Opposite Hand for North Shaft

SEC. T-T SEC. S-S

SECTION Q-Q
Opposite Hand for North Shaft

SECTION K-K

ELECTRICAL CONDUIT SYSTEM
INTERIOR RIVER SHAFTS, NEW YORK

Notes
All conduits ¾" iron unless otherwise noted
All ¾" conduits terminating in boxes to be closed with capped bushings; all ¾" conduits terminating in boxes to be closed with pennies under the locknuts
Where conduits having the same mark appear on different floors, the diagram is same, including the vertical run
All ground connections to be solderal and soldered where ground copper are connecting to steel, the surface thereof should be sandpapered, until shining brightly, and before connection is made
Conduits terminating above or below floor slab to be threaded and capped from 3" to 10" above or below floor slab

REFERENCE DWGS

for Lighting System River Shafts, N.Y. see Contract Dwg # 139	Filed No. 3
for Typical Details of Sheet Iron Pull Box	" 138 " 6
for Details of Cast Iron Pull Box	" 139 " 10
for Interior River Shafts, N.Y.	1924-67 " 13

LEGEND
Conduits in walls or floor unless otherwise noted
Branch Conn
6"x6"x5" Cast Iron Pull Box
4½"x4½"x4" Cast Iron Junction Box with Cover

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 138.

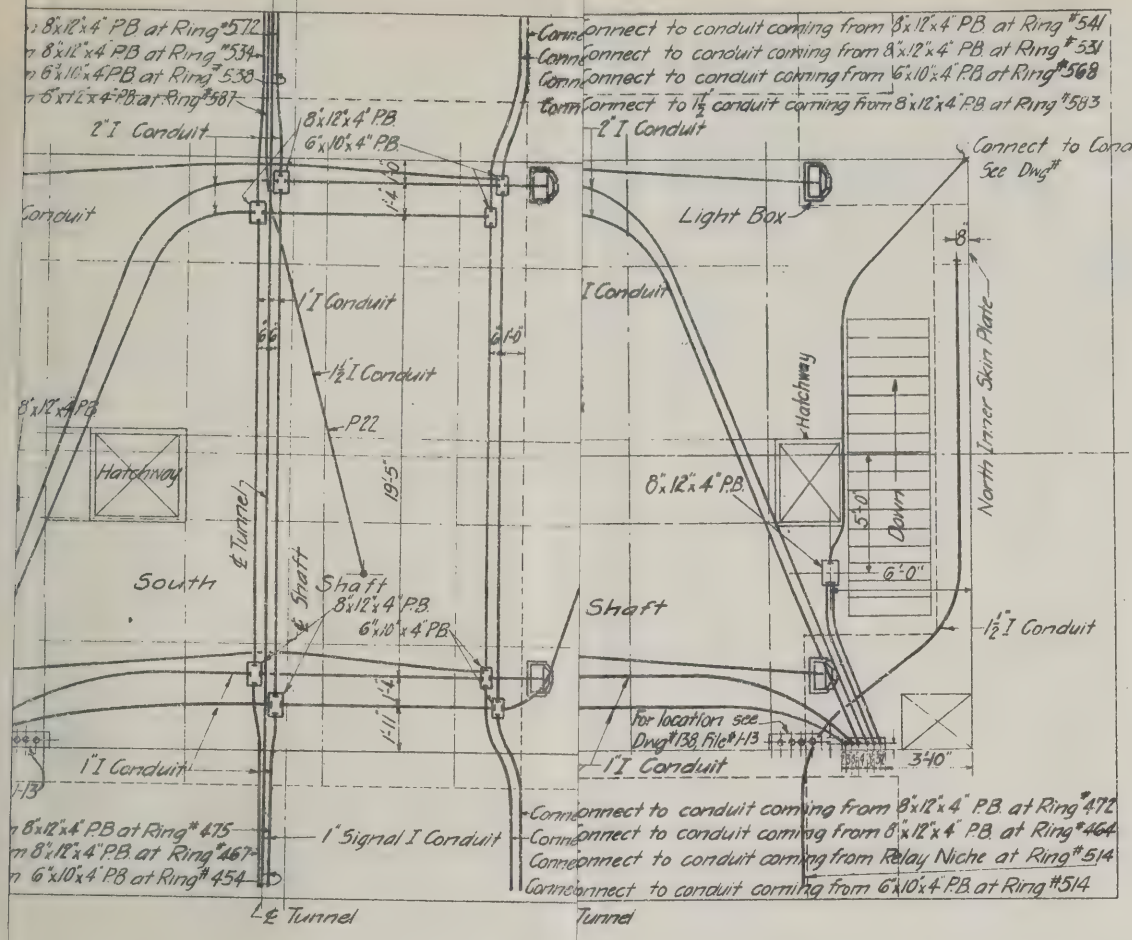
J. B. Y. Gilbreath
CONSULTING ENGINEER

SCALE: 1/8" = 1 FOOT EXCEPT AS SHOWN
DATE: JULY 4, 1925
Ole Singstad
CHIEF ENGINEER
FILE NO 1-3

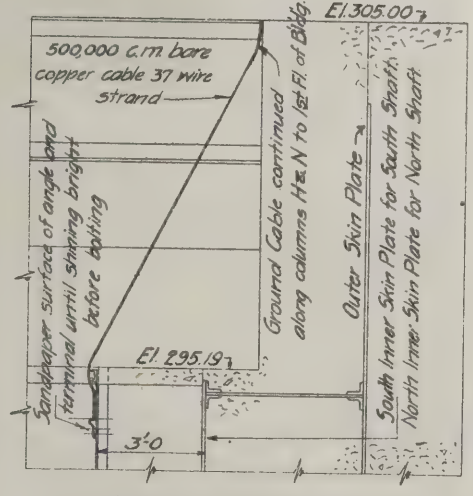
Drawn by [illegible]
Traced by [illegible]
Checked by [illegible]

D. N. Gehl
Assistant Engineer

M. B. Brown Printing & Binding Co.,
12 & 14 Vandam Street, N.Y.


8"x12"x4" PB at Ring #572
8"x12"x4" PB at Ring #534
6"x10"x4" PB at Ring #538
6"x12"x4" PB at Ring #587
2" I Conduit
8"x12"x4" PB
6"x10"x4" PB
1" I Conduit
1½" I Conduit
P22
Hatchway
℄ Tunnel
South Shaft
19'-5"
1" I Conduit
8"x12"x4" PB at Ring #475
8"x12"x4" PB at Ring #467
6"x10"x4" PB at Ring #454
1" Signal I Conduit
℄ Tunnel
Connect to conduit coming from 8"x12"x4" PB at Ring #541
Connect to conduit coming from 8"x12"x4" PB at Ring #531
Connect to conduit coming from 6"x10"x4" PB at Ring #568
Connect to 1½" conduit coming from 8"x12"x4" PB at Ring #583
2" I Conduit
Connect to Conduit # See Dwg #
Light Box
I Conduit
Hatchway
North Inner Skin Plate
8"x12"x4" P.B.
Down
5'-0"
6'-0"
Shaft
1½" I Conduit
For location see Dwg #138, File #1-13
3'-10"
1" I Conduit
Connect to conduit coming from 8"x12"x4" P.B. at Ring #472
Connect to conduit coming from 8"x12"x4" P.B. at Ring #464
Connect to conduit coming from Relay Niche at Ring #514
Connect to conduit coming from 6"x10"x4" P.B. at Ring #514
Tunnel

¾" Iron unless otherwise noted.
…its terminating in boxes to be closed with capped bushings;
…its terminating in boxes to be closed with "pennies" under the


El. 305.00
500,000 c.m. bare copper cable 37 wire strand
Ground Cable continued along columns to N. to 1st Fl. of Bldg.
Outer Skin Plate
South Inner Skin Plate for South Shaft
North Inner Skin Plate for North Shaft
Sandpaper surface of angle and terminal until shining bright before bolting
El. 295.19
3'-0

SECTION H-H

Opposite Hand for North Shaft.

0 1 2 3 4 Feet.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 139

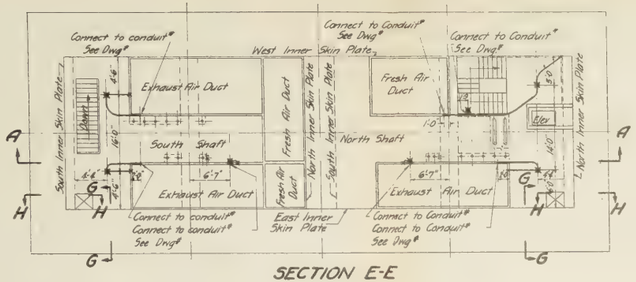
SCALE: 0 1 2 3 4 5 6 7 8 FEET
EXCEPT AS NOTED

DATE AUG 4, 1925

Ole Singstad
CHIEF ENGINEER

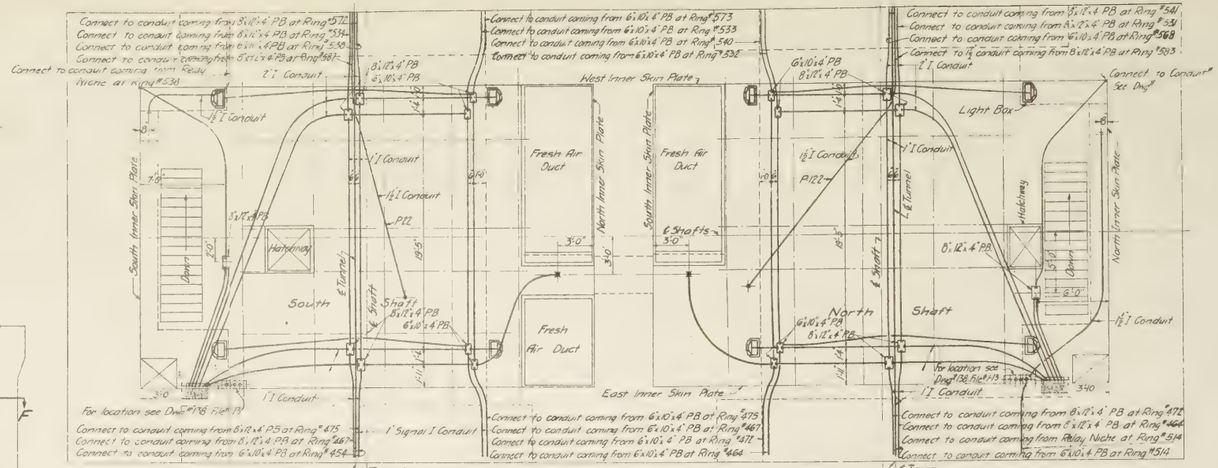
FILE NO. 1-13

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



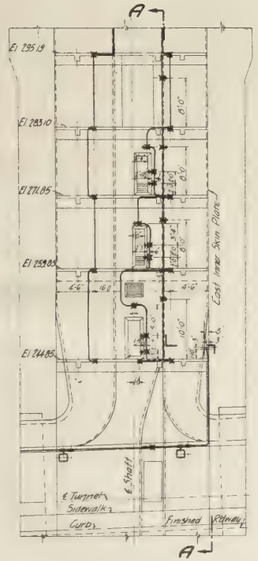
SECTION E-E

SECTION F-F

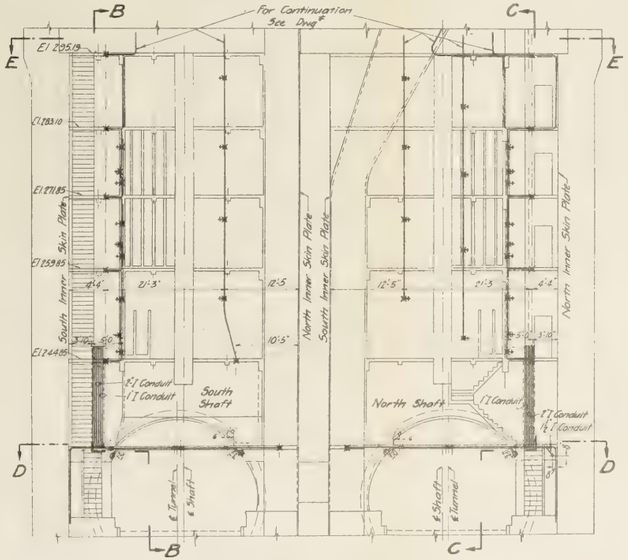

Connect to conduit coming from 8'x10'x4' PB at Ring #572
Connect to conduit coming from 8'x12'x4' PB at Ring #534
Connect to conduit coming from 6'x10'x4' PB at Ring #538
Connect to conduit coming from 8'x12'x4' PB at Ring #537
Connect to conduit coming from Relay Niche at Ring #538
Connect to conduit coming from 6'x10'x4' PB at Ring #573
Connect to conduit coming from 6'x10'x4' PB at Ring #533
Connect to conduit coming from 6'x10'x4' PB at Ring #540
Connect to conduit coming from 6'x10'x4' PB at Ring #532
Connect to conduit coming from 8'x12'x4' PB at Ring #541
Connect to conduit coming from 8'x12'x4' PB at Ring #531
Connect to conduit coming from 6'x10'x4' PB at Ring #568
Connect to 1½" conduit coming from 8'x12'x4' PB at Ring #503
2" I. Conduit
Connect to Conduit# See Dwg#
Light Box
West Inner Skin Plate
South Inner Skin Plate
North Inner Skin Plate
Fresh Air Duct
Hatchway
Ladder
South Shaft
North Shaft
E. Tunnel
E. & E. Tunnel
1" I. Conduit
1½" I. Conduit
P122
8'12'4' PB
6'10'4' PB
5'x12'x4' PB
For location see Dwg# 138 Fig# 13
340
Connect to conduit coming from 8'x12'x4' PB at Ring #475
Connect to conduit coming from 8'x12'x4' PB at Ring #467
Connect to conduit coming from 6'x10'x4' PB at Ring #477
Connect to conduit coming from 6'x10'x4' PB at Ring #464
Connect to conduit coming from 8'x12'x4' PB at Ring #472
Connect to conduit coming from 8'x12'x4' PB at Ring #466
Connect to conduit coming from Relay Niche at Ring #514
Connect to conduit coming from 6'x10'x4' PB at Ring #514
1" Signal I Conduit

SECTION D-D

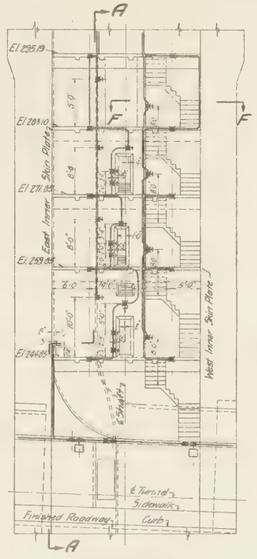
Feet



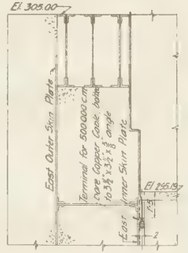
SECTION B-B



SECTION A-A



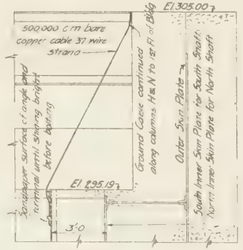
SECTION C-C


El 305.00
East Outer Skin Plate
Terminal for 500,000 C.M. Paper Cable 1ph. to 3½"x3½"x½" Angle on Inner Skin Plate
El 295.19
East Inner Skin Plate

SECTION G-G

Opposite Hand for North Shaft

Feet


El 305.00
500,000 C.M. Bare Copper Cable 37 wire Strand
Bondwipe surface of angle and terminal until sharp bright before taping
Ground Cable continues along columns thru N to 1st Fl. Bldg.
Outer Skin Plate
El 295.19
South Inner Skin Plate for South Shaft
North Inner Skin Plate for North Shaft
3'0

SECTION H-H

Opposite Hand for North Shaft

Feet

LEGEND

- 3½ x 3½ x 2" Cast iron Outlet Box in Ceiling
- 3½ x 3½ x 2 Cast iron Outlet Box in Wall
- Conduit turning up
- Conduit turning down

REFERENCE D.W.G.S

	See Contract Sheet No.	Sht.	Fig.
For Interior River Shafts, New York	137	1	3
For Typical Details of Sheet Iron Pull Boxes	55	1	3
For Detail of Cast Iron Pull Boxes	59	1	3
For Electrical Conduit System, Interior, River Shafts, N.Y.	138	1	3
For Cast Iron Light Boxes	126	1	3

Note

All conduit ¾" iron unless otherwise noted.
All ¾" conduits terminating in boxes to be closed with capped bushings, all larger conduits terminating in boxes to be closed with pennies under the bushings.

LIGHTING SYSTEM

ELECTRICAL CONDUIT SYSTEM INTERIOR, RIVER SHAFTS. NEW YORK

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 139

L. B. Hallmill
CONSULTING ENGINEER

SCALE 1" = 1 FOOT UNLESS OTHERWISE NOTED

DATE AUG 4 1925

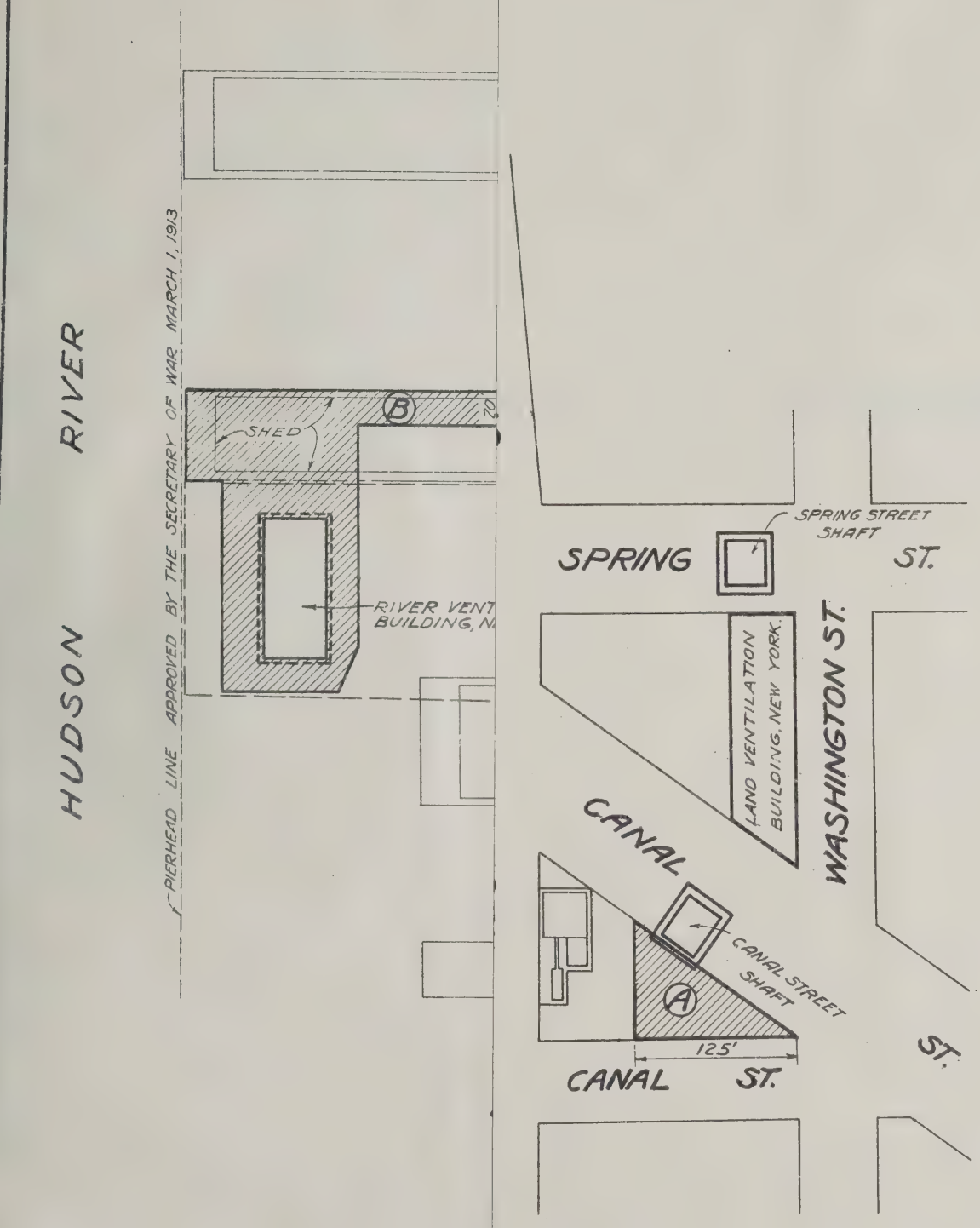
Ole Singstad
CHIEF ENGINEER

FILE NO. P-13

DRAWN BY L. B. H.
CHECKED BY L. B. H.

C. E. Smith
ELECTRICAL ENGINEER
ENGINEER OF DESIGNS

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL

CONTRACT No. 13
CONTRACT DRAWING No. 140

SCALE: 0 20 40 60

DATE AUG 4, 1925

ENGINEER OF DESIGNS

CHIEF ENGINEER

DRAWN BY C.E.J.
CHECKED BY J.A.S.

FILE NO. 1-13

M. B. Brown Printing & Binding Co.
37-41 Chambers Street, N. Y.

HUDSON RIVER

PIERHEAD LINE APPROVED BY THE SECRETARY OF WAR MARCH 1, 1913

PIER NEW 36

SHED

(B)

20'

PIER NEW 35

RIVER VENTILATION BUILDING, NEW YORK

PROPOSED NEW PIER

PIER NEW 34

PIER NEW 33

BULKHEAD LINE APPROVED BY THE SECRETARY OF WAR APRIL 25, 1890

MARGINAL ST.

WEST ST.

SPRING ST.

SPRING STREET SHAFT

WASHINGTON ST.

VENTILATION BUILDING, NEW YORK.

CANAL ST.

CANAL STREET SHAFT

(A)

125'

LEGEND:

(A) Denotes area available for Contractor's use for a period of 10 months.

(B) Denotes area available for Contractor's use subject to the use of other Contractors.

AREA AVAILABLE FOR CONTRACTOR'S USE

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

THE HOLLAND TUNNEL
CONTRACT No. 13
CONTRACT DRAWING No. 140

SCALE: 0 20 40 60

DATE AUG 4, 1925

ENGINEER OF DESIGNS

CHIEF ENGINEER

DRAWN BY
CHECKED BY

FILE NO. 1-13

M. B. Brown Printing & Binding Co.
37-41 Chambers Street, N. Y.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 114095638